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THE PEDAGOGY OF COLLEGE ETHICS

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I Ethics and the College Youth

The fire of moral reform which swept through the country leaving in its path the scare heads of the muck-raker, the renovated departments of government, and the investigated public servant and interstate corporations, has been followed and supplemented by the wave of reform and investigation for business efficiency and efficiency standards. The one is the complement of the other, if they are not identical in function. Moral enthusiasm bent on the suppression of vice in all forms of life increases efficiency; and conversely, the increase of efficiency eliminates immorality. Hence the enthusiast for either morals or efficiency cordially welcomes the work of the other. The wave of moral reform has struck the school, demanding appreciation of responsibility for the moral integrity of the coming generation. And the school is trying to respond. Opinions and experiments galore are reported; France is claiming to be well on the road to the solution of the problem of secular moral education; and the eyes of moral educators are turned with expectation and interest to the efforts of Japan. President Hall, after an extensive review of the literature on moral education in the public school, states that there is no agreement and thus far no accepted solution of the problem (34. Vol. 1. Chap. 5). The value of the various schemes has yet to be ascertained.

Much of the force of this storm of criticism has fallen upon the college course in ethics. Where it has not been struck directly, it has been severely jarred, for it is inevitable that immoral conditions of college life and moral inefficiency of the college product should reflect upon the course in ethics. Perhaps the criticism may not be wholly justifiable, because

many never take this course, and because there are so many other factors to build up or break down the moral life of the college student. Yet it has forced the teacher of ethics to many a heart searching with the result that many reforms have been attempted; and it is sure to cause a careful consideration of the proper content and the function of the ethics course. At present we have no scientific pedagogy of college ethics; only a vast collection of old line texts, a few attempts at an improved text, a considerable literature of criticism; and a smaller literature reporting methods tried and suggestions for improvement based on an intimate knowledge of the needs and capacities of the college adolescent. The teaching of ethics and the cultivation of the moral life may never be reduced to an exact science, nor even as approximately exact as the teaching of other subjects, for the large part of morality is below the threshold of consciousness and many other factors than the class room affect it; but the fact that greater efficiency has been attained in some cases indicates that the methods of the many may be improved and that a thorough understanding of the needs and capacities of the adolescent plus a knowledge and control of the moral influences of college life will produce a course in ethics the content of which and the teaching of which will be a tremendously effective part of the moral development of the student.

The complexity and the seriousness of the problem must be appreciated. The teacher who knows his problem sees perfectly well that restrictions of college life cannot and must not be so close as those of the home and preparatory school. Dean Briggs of Harvard calls attention to the protest on the part of the preparatory school teacher that students who under him have been exemplary in conduct for several years break down in a few months after entering college, and replies that something must be wrong with the preparatory methods if the student cannot stand up under the new conditions more than a few months. The blame falls not entirely on the college. Freedom of life in college is necessary as a preparation for the greater freedom of life after college. The adolescent must gradually learn to depend on himself and whether in college or not the process is at best a dangerous one. A side light is thus thrown on the importance of some degree of self-government in preparatory school days. In a sense the college does stand *in loco parentis,* but even in the best ordered home the parental control begins to relax in these years. When a boy enters college he begins a new mode of life which immediately makes a deep impression upon him. The emotional change and excitation is tremendous

and for a time more important than what he learns of an intellectual nature. There is the thrill of realization of the desires of years or months of anticipation. At last he is a "college man." It is incumbent upon him to adopt the ways of a "man." And here is danger. There is to be change, there must be change, but in what direction shall the change be, and can the course in ethics direct it? In part the ethics taught can direct the change, but apart from some talks on hygiene in Freshman year the ethics rarely comes before Junior or Senior year. Much of the moral education must and will come from the contact with others, and from that vague but real thing termed "college spirit." The nature of that spirit is all important and it may be directed somewhat by the teaching of ethics. As this course directly touches the upper classmen and the college spirit is largely determined by them, it may thus influence the environment and the influences at work upon the younger students. The emotion aroused by the new experiences and opportunities of college life are bound to find expression in changed ideals and changed conduct. New moral problems arise because of the new opportunities and new freedom of conduct. With the large number, the moral attitudes and reactions have been a gradual growth under home and other healthful influence. The moral character is very largely unconscious, or unreasoned. Habits of judgment and conduct have been formed because such was the way of associates in home and school life. Now all this is seen from a new point of view. Real moral questions arise, conscience is effective, and new standards are to be reasoned out, rightly or wrongly. The youth feels that he should accommodate himself to the ways of the upper classmen who surely know what is right and in contrast with their learning and experience with life the old ways of the home folks are likely to look prudish and picayune. He has not, far too often, learned to discriminate between the good and the bad among his college elders; but even though he does attempt to discriminate and even though he does discriminate rightly, there is nevertheless a new and real experience with temptations and perhaps real wrong which he has never had before. Morality can no longer be an unconscious affair. He has thought upon these things; he has been tempted; he has met men who live according to different moral standards than his own; and it has forced morality to become a matter well within the field of consciousness. The nature of these college temptations and the way they influence the student thought must be taken into consideration in the making of a course in ethics. How bad

they are is a matter of much difference of opinion; probably much of the disagreement due to the conditions prevailing in different sections of the country. A few years ago a Connecticut woman caused a furore of discussion by publishing the statement that she "would rather send her son to hell than to Yale College." If Mr. Birdseye's description of student life were to be literally accepted, she would not have been far wrong. His awful description of the extent of sexual immorality, venereal disease, drunkenness, etc., assented to as he says by many college authorities, is harrowing in the extreme; and if true in its entirety, demands immediate and drastic measures (5 Chap. 12). In spite of his sweeping statements, the basis for which he does not fully give, there is considerable evidence which points to a rather better condition than he generalizes. The vast extent of Christian Association work, Bible study movements, student volunteer missionary movements and interest, social reform work, and the like indicate that college life is not quite the hell which he depicts. And the study of conditions made by the association of Ohio colleges (57), provoked by Mr. Birdseye's statements, indicates that conditions in those colleges are not so bad as his general estimate, but are decidedly better. Every college man and every one who has had much to do with college students knows that such temptations exist and that some fall before them. Brockman's collection of confidential statements from college and theological students indicates clearly the strength of these in the lives of many youths. His list of severest temptations is not long (10). Dishonesty, profanity, etc., figure largely, but sexual temptations number more cases than any other three put together. The long list of statements which he prints shows the awful extent of the sex problem and the morbid state of mind often aroused by it. The curse of dirty athletics, now fortunately much less severe, bad fraternity spirit, college politics, drunkenness, cheating, lack of honor in business relations, and a long list of other sins might be mentioned as existent and demanding consideration. They do exist and perhaps always will more or less, as college is but a miniature world in itself and what the world has it has; but as the aim in life is to stamp out disease and vice so should the aim in college be; for although the aim may never be attained, moral character is made by the effort.

Those who study deeper see something of the mental process which the student passes through in the adjustment of his moral standards to the larger relations of life. He is not mature, the adolescent process is not complete, the moral

instinct has not yet reached its fullest adjustment. There is a lack of appreciation of moral proportion. Dean Briggs has treated this in a little book with sympathetic understanding. (9). Paraphrasing from his text, as a school of character college must be a school of integrity, yet there are certain kinds of dishonesty readily condoned among college students. Undergraduate standards of honor for college officers are sensitively high and there is often a high standard of honor manifested in the conduct of athletic training, in the selection of men for class presidencies, athletic captaincies and as leaders in general; yet there is an inconsistent want of honor manifested in athletic contests, in written work, in excuses for neglect of study, in relation to non-students, etc. This want of proportion is peculiarly evident when it is considered an unpardonable disgrace to break training, yet not disgraceful to squander the hard earned funds sent by parents. The student needs to learn that a lie is a lie and a theft a theft wherever it is committed. Dean Briggs, as do others, considers this a part of the development process. This lack of the undergraduate is due to lack of experience which time will correct. The setting of high standards for others in some cases will in time bring him to see the necessity of them for himself. And the few psychological studies which have been made of the college adolescent indicate this progressive adjustment of moral standards. Dr. Tanner's study of the college woman's code of honor (83) assuming common honesty finds that "the college girl appears to be a person with a thoroughgoing contempt for sneaking and out and out lying but with sufficient intelligence and sense of humor in most cases to enjoy any sort of contest with wits even though she risks her scholarly reputation thereby" (p. 115). And again, "Even in the cases where she is below the average in her standards, the frank, almost naive admissions and the reasons given for the views, seem to indicate that these girls, at least, are more undeveloped than bad." (p. 116). The fact that the full appreciation of self-control and its moral contingencies is not yet attained is indicated by the returns summarized by Dr. Tanner thus: "The thing that is least condemned is deception for the sake of some one else, while the thing that is hardest for a girl to do is to undertake the reporting of a wrong doer" (p. 117). Earl Barnes obtained returns from both men and women in a university on a problem of honor. He found that if the penalty seemed extreme there was a tendency to shield wrong doers, and that the feeling of social obligation thus involved seemed to be a little more developed in the men than in the women. A significant

statement in his study is that 18% of the men and 17% of the women knew "the right but frankly say they lack the moral courage to do it" (3 p. 486). It is his conclusion that the "sense of the larger social self is only partially developed" (p. 487). Sharp's studies (75) might be used to indicate a similar fact although such was not his purpose. This progressive adjustment and enlargement of standards is manifest also in the changes of attitude which take place toward religion in college years as Starbuck, Coe and Hall have shown. Dr. Burnham, too, has called attention to the philosophical tendency and propensity of the later adolescent (12), which is now generally recognized in adolescent literature. All these show that the college years are a period of adjustment and it is in large part a conscious adjustment. The youth is trying to get a rationally integrated concept of life, affairs, morals, religion, etc. Bizarre notions and principles are sometimes worked out and adopted, immorality is thus sometimes justified, but each is only a stage in development and not a finality. The youth is in process and it is the privilege of the moral teacher to take the youth at the very time when he is formulating his ideas of right and wrong and to guide those formulations.

It is to be remembered, too, that there is a change in progress from external to internal authority. Hitherto external authorities have been submitted to, especially in morals and religion; but now there is with approaching maturity the progressive change to an internal authority. The unconscious moral standards gained largely by imitation and the reliance upon some external authority for moral control are breaking down, especially the latter, and something must be put in their place. What to put in their place will be the substance of most of this paper but in a word it is the feeling of honor, self-respect, personal superiority to anything beneath the most virile of moral standards, and moral vision. This is the religious attitude. The union of self-respect, honor, which is the essence of individual morality, and moral vision which sees the cosmological significance of life, is religion. It is the union of the ethical and the cosmological. Together they produce sympathy and all its higher derivatives which are the flower of modern morals, and they touch the old fundamental, basal feeling of religion which has motivated so much of life. Where religious teaching is for one reason or another prohibited, there is no reason why the religious feeling may not be appealed to indirectly in presenting the cosmological aspects of ethics. The more directly it can be used, however, the better, for it reinforces and deepens the impression.

With the world calling for moral power and efficiency, and with the adolescent of college years in the nascent period of moral adjustment, how insufficient, foreign, barbarian do the arid ethical logomachies of most text books appear? When moral problems are rife with the student we have been leading him through discussions of Hedonism, Intuitionism, Idealism, Egoism, Altruism, Utilitarianism, Determinism, Indeterminism, a little of Kant, some of Hegel, enough to confuse the student, various references to Plato, Aristotle, Bentham, the Mills, Sidgwick, Martineau, and perhaps a dash of Spencer or Darwin, if they were not too heretical. To be sure, many of the text books have some things to say about the development of personality and the value of habit in the formation of character, but in point of time and space they are far outstripped by the speculative problems. One can easily believe the truth of the oft-quoted story of the college boy who upon being dismissed from college said he didn't care, he got 90 in ethics just the same. There is a growing feeling, as a few of the new text books indicate, to relegate these historic discussions to an advanced, elective course and to make the first course in ethics meet so far as is possible the needs of the student. To do this there must be a considerable treatment of personal hygiene, eugenics, all the factors in vital efficiency, social ethics, moral reforms, etc. These are indispensable topics, yet the old historic problems which have formed a large part of the ethics teaching of the past need and deserve careful scrutiny before they are bodily ejected. Those who are clamoring for the rejection of the old and seemingly worn out discussions and systems are not without much right on their side, for there is a manifest danger in dwelling upon them with students of the present. The particular turn which each took at any particular time in the history of thought was the product of the exigencies of that time and of the temperament of the thinker. To lead a student through these old discussions is a waste of good energy which might be utilized in the consideration of living problems, or the consideration of modern phases of the same problems; and if perchance the student becomes interested in these ancient quibbles, the interest is calculated to detract from the real problems of present life and when he gets out in the world he will find that the ethics within the college walls was a vastly different thing from the ethics of commercial and professional life. And the critics are doubtless right when they say further that the ratiocinative treatment of ethics develops an undesirable attitude toward the subject. It divorces ethics from life and places it in some transmundane sphere

where it is treated as material for speculation. It is directly opposed to the long established pedagogical principle of procedure from the concrete to the abstract. But a further criticism may be raised to the effect that in the time allotted to the average course in ethics no adequate presentation of the men, the problems, and the systems produced is possible. Look, however, at the topics stressed in recent texts and consider if they are sufficient; personal hygiene, manners and etiquette, liberties, trespass, justice, selfishness, service, welfare, charity, duties to the family, the community, and the State. These are valuable, important and necessary; and they possess the additional charm, necessary today, of being pragmatic. But it is the successful-life Pragmatism of Protagoras; not the Pragmatism of James which sees a real value in the belief in free-will, the belief in a moral universe, etc., any of those great concepts which have so long helped mankind to interpret experience and to progress. These problems contain a germ of truth, are fundamentally human, else they would not have been so warmly discussed and have lasted through so many ages. And furthermore, they arise at some time in the life of every individual. No college student can take a course in psychology without facing the freedom of the will problem, no college student can take a course in biology, if it is at all dynamic, without being stimulated to think a little concerning the nature of the world in which he lives, and none can view life with the spirit of independence in the broadening and emancipating environment of academic life without these broader, deeper, more vital, ancient moral problems coming more or less clearly to his attention. In teaching physiology today we do not force a student to work through to full comprehension the Vesalian and Cartesian theories of the movement of animal spirits in the nervous system, but we do teach him the present solution of the same problems which Vesalius and Descartes struggled with. Likewise it may not be wise to force a student of ethics through the systems of Plato, Augustine, Spinoza, Butler, Paley, Hume, Kant, Hegel, Sidgwick, Spencer and the Mills, but it does seem wise to give him the modern attitude toward these problems or at least a working basis for the solution of them as they arise in his own life, one which shall be in harmony with the spirit of dynamic practical ethics expressed by the advocates of radical reform in the ethics teaching. Put to the pragmatic test one finds that with the vast majority it does make a momentous difference whether or not an individual believes that he lives in a moral universe. The history of human experience shows that the profoundly religious at-

titude is a moral dynamic of superior potency. Here the depths of the soul are touched, and here, if the geneticist is right, the whole experience of the race reverberates. The importance of emotion in the formation of moral judgments and moral standards has been demonstrated by psychology and the course of ethics which does not reverently use this factor is missing the most powerful dynamic in the building of character and in the inspiration to moral activity which the race possesses. The familiar terms Hedonism, Intuitionism, Idealism, Egoism, Altruism, Utilitarianism, Determinism and Indeterminism, stand for bewildering mazes of controversy but they conceal very real problems. They are the scars left by the struggle to reach the present more perfect concepts, but the product of the struggle is none the less important, the more so rather because of the fight to attain. The youth has these same problems to face and without guidance he may land on any one as an adequate aim and principle of life. The principle of health, happiness, pleasure, vitality, involved in Hedonism and Utilitarianism, is an essential part of modern ethics, but as an end in itself it is not adequate; the principle of immediate judgment of right and wrong, the seeming to know intuitively involved in Intuitionism, contains much of truth, but as a court of final appeal in moral problems it is utterly insufficient; the principles of loyalty to the self, loyalty to the family, loyalty to the community, loyalty to the nation, loyalty to the race, involved in Egoism and Altruism, are all essentials in modern life, but to stop at any one of them is to have made but part of the journey which the moral thinkers of the race have made; and the principles of supine helplessness in the face of circumstances or of internal power to overcome any obstacle, involved in the wearisome discussions of determinism and indeterminism, present a fundamental problem, a working solution of which is indispensable in an epoch of moral evolution. These may seem transcendent and other-worldly to the advocate of crass practicalities merely; but they are the principles under which the more practical and concrete problems are subsumed, and to which the student will more or less consciously soar, and they meet the pragmatic test of value. It is the prerogative of youth to dream and to seek the solution of universal problems; hence it is the privilege of the teacher of ethics to guide him to a solution which shall bring him back with unabated but increased zest and enthusiasm to the immediate problems of conduct.

II Influence of Scientific Study on Moral Thought

Fatalistic determinism presents a grave danger to the college youth in the moralizing process. It is a pit-fall, a blind alley, into which he is almost sure to slip if there is not some well designed instruction to prevent. However great the familiarity with the scientific attitude may have been before college days, and it is rarely very great, the force of its significance is now doubled and trebled by the very natural application to personal problems. In the readjustment process the youth is aware of various appetites, desires, and passions which persist in their demand for satisfaction. He is confronted with the scientific attitude which seems to him decidedly mechanistic, explaining everything by an indefinitely extensive chain of antecedent causes. There seems no place for will, for individual initiative. It is the almost inevitable result that the youth finding his appetites, desires, and passions so powerful and persistent should interpret them as his own peculiar endowment beyond his power of control. Such an interpretation is of course indescribably dangerous and not that of the broader-minded scientist; but it is the one which the student tyro in science is most likely to make. Physics and chemistry have left on his mind a decidedly mechanistic impression. Psychology, too, if he has had it, leaves a similar impression, perhaps even more dangerous because it is interpreting the phenomena of mind causally even to an explanation of the will as an instinct foreseeing its end. And on top of that, biology interprets life in terms of a causal series.

The study of living organisms and their transformations, following them out in their evolutional series down to and including man, is fascinating because it is so closely related to the most fundamental problems of the personal life. Here the student touches the perhaps hitherto tabooed theory of evolution and sees it handled without gloves. It sends a thrill of excitement through his whole being, which is easier to feel than to explain. He feels himself no longer a tyro; he has grasped for himself the great fundamental problem of life and he will no longer be subject to the absurd dictates of religion, the hushing attitude of pious parents and former teachers. Smug with the conceit of his own vast learning he proceeds to explain life and himself in causal and mechanistic terms. Pres. Hyde has cleverly presented the way in which the youth thus educated thinks it far better to accept the opinions of Tyndall, Huxley, and Spencer, who have studied the very fundamentals of life at first hand, than to accept the dogmatizing of the priest and theologian (44). He is

right up against the same problem which has troubled so many of the great minds of modern science, but without the maturity of character and ability to withstand the reactionary effect upon his morals and to think the problem through.

To the youth in this state of mind the scientific position of "suspended judgment" is a drowning man's straw. It is valueless because the youth is intolerant of all that does not explain. He cannot be tolerant. There is the old urge of life manifesting itself within him which will not stop before such a figment of maturity. One could as well stop Niagara with a pebble. A solution of some sort will be made and if fatalistic mechanism seems to be the right one it will be adopted. And what solution the youth adopts may mean all the difference between moral death and moral immortality. Ethics must handle this question, but few text books treat it adequately or conspicuously. The free will problem appears; but rarely is it presented in language which relates it immediately to life. Ethics has been too fond of turning to metaphysics for its explanations. The adolescent likes to dream and speculate and philosophize, it is true, and it is well that he should; but an explanation of this problem which is more or less shadowed by metaphysical clouds does not help much in the actual process of living. Metaphysical freedom does not help the youth to be honest or to overcome the desire to drink with his fellows nor to master his passions, although he may enjoy the theory as a bit of mental gymnastics. He must be shown concretely that the environment has a powerful influence upon the physical and mental development, that inner effort can overcome and change heredity, that there is a psycho-biological explanation of the free will problem which works, and which is not contrary to a scientific explanation of the phenomena of nature. The Weismannian continuity of the germ plasm theory must be presented with emphasis, because it shows how great a factor environment and response to environment is in individual development. He must be shown, too, the power of nurture over nature; not in theory only but in actual cases. He must, of course, be allowed to see the facts and force of heredity so far as it goes; but as his own inner nature and problems at that period of life dispose to a preperception for mechanistic explanations the emphasis needs to be thrown on to the other side of the problem. Those marvelous reforms after adult life has been attained which Begbie reports (4) are worth calling attention to. And Dugdale's famous study of the Jukes, though often quoted as a wonderful illustration of heredity, which, indeed, it is, is an excellent and impressive

illustration of the power of nurture over nature. Some of that family, in spite of the direful Juke heredity, were by virtue of different environment and different interests developed into moral law-abiding citizens (21).

Approached from this biological standpoint and with the attitude of the genetic psychologist a working solution of the student's free will problem may be reached which is not in opposition to his scientific interests. Of all modern writers Jules Payot comes nearer than any other to such a genetic theory of freedom, but he unfortunately just misses that explanation which might be perfectly satisfactory to the youth struggling with the deterministic problem. All that Payot says concerning the development of liberty, the cultivation of character, the education of the will as he calls it, cannot be too highly commended. It has made of his book a work so valuable that it should be on the desk of every teacher of ethics, if not in the hands of every student. No one else has so feelingly and so adequately and so stimulatingly presented these all important facts in the cultivation of character and personal efficiency. But there is a confusion regarding the statement of his theory of the will which if left as it stands would not solve the student's problem. In the place of the unsatisfactory theories of history, Payot attempts a compromise by which freedom is gained by struggle and hard work. In his own abbreviated form his whole aim is to show how to transform "a weak vacillating desire into a lasting volition" (64 p. 29). It is upon this desire that he builds. He posits its existence in every one not mentally afflicted; he believes that every one has a desire for improvement, weak and faint though it be. By means of meditative reflection, the association of ideas and the arousal and nature of the emotional life may be altered to develop the desire and to assist it; the importance of action in the development of will is stressed; and the indispensable factor of hygiene is described at length as a basis for physical power behind the will. The attainment of the goal is only possible by a long and bitter struggle, and is not designed to appeal to the lazy man. It is a long and arduous undertaking but the rewards are worth the fight.

But this is not an answer to the freedom problem. It is substituting a very valuable presentation of pedagogical applications of the psychology of attention in the place of will. His aim for all in life is a trained attention which can remain fixed upon its work for long periods of time and thus assist the possessor to valuable productivity. The student puzzling over the mechanistic interpretation of the universe

and himself, especially himself, would not find much help in this. He might be perfectly willing to admit all that Payot says about the cultivation of the desire by meditation, action, hygiene, etc., yet he might think to find in himself a lack of power for the self-application of such a regimen. Payot has made the inhibitory power of the strong will synonymous with freedom, whereas freedom is a feeling aroused by the choice process of consciousness and may occur as well in the strong-willed as in the weak-willed, according to Payot's description of the strong and the weak. It is desire plus this feeling of freedom to choose which makes possible the transformation from weakness to strength. The feeling of freedom makes all the difference between activity and passivity. The psychological key to the problem lies in this feeling of freedom. The fact of this state of consciousness, its universality, and its persistence, demand explanation. A functional examination of it reveals that it is important to both the individual and the race, and is of long, very long standing in the latter.

To get at the genetic point of view it is necessary to drop for the moment all other discussions and theories of freedom and will consciousness and to consider what gave rise to all this. Looked at thus we find a very general belief among all mankind that a man can do about as he pleases if he wants to. Much of the time he responds in an habitual, mechanical sort of way, but he, nevertheless, feels that at times he can alter his conduct and respond in a manner not suggested by circumstances. There is a seemingly innate capacity for accomplishment which gives to the healthy, vigorous adult the idea that he can do whatever he considers wise. Man has overcome all sorts of obstacles in the struggle to exist, he has fought and vanquished the beasts of the forest, he has overcome other men who have opposed his progress, he has risen above the exigencies of climatic conditions, and he has learned for the sake of future comfort not to yield wholly to present impulses and desires. When the question is asked, "Can you do as you wish?" the natural man answers, "Of course I can do as I wish, anything within reason." Thus there is the peculiarly human recognition of the possession of power whereby it is possible if wise to rise above the constraint of environment and habit, to act at times contrary to the usual reaction to given conditions. Any other attitude is the attitude of a mind "sicklied o'er with the pale cast of thought," and the product of like minds. It is this feeling of power, feeling of superiority to conditioning circumstances, the feeling of freedom for self-expression as

Baldwin calls it, which has preserved in man's mind in spite of the sophistication of theology, philosophy, and psychology, the idea that "our wills are ours," although we may be obliged to add as does the poet, "we know not how." This is the generic feeling underlying the much-abused term, freedom of the will and explains the oft-recognized persistence of the theory. Its great age is overpowering in its magnitude. Any effort to comprehend it would strain the imagination to the breaking point. It is as old as humanity and perhaps far older. Its history could be traced far back of civilization. The savage council of war sitting in deliberation, the barbarian choosing a temporary place of abode, the troglodyte preferring to wander northward with the retreating ice sheet, and the arboreal ancestor of man selecting a comfortable tree, would all figure in the history of the feeling of freedom. Perhaps its history goes farther back still even into the lives of the lower animals, perhaps it has as its antecedents every experience of selection, the choice of a mate, the choice of a good place for a nest, the choice of one food as preferable to another, and so on down to the very earliest experiences of life. Just where in the prehuman or the human scale the feeling of freedom to have done otherwise or to do as preferred begins, we may never know; but we can ascertain enough to be certain that it is very old, one of the oldest, perhaps, of human feelings. Its persistence today is not then to be wondered at. In spite of all the arguments to the contrary mankind still believes in his freedom.

From this feeling of power with the recognition of the desirability of an act, the giving of assent, and the occurrence of the act as an immediate consequent arises the idea of will. If one particular experience of will, one will attitude of consciousness, is isolated from all the rest of life and analyzed into sensations, images, and affections, we learn its anatomy; if all the will experiences and expressions of an individual or a race are examined for their relations, effect on themselves, on the individual, on the race, on the environment, if their general principles, their potency, their values under different conditions, etc., are determined, we learn its physiology; but if all the conscious accompaniments of action and reflection, in all species extinct and extant, from the most primitive living organism to a twentieth century man are carefully collected, correlated and arranged to show their evolutional sequence and value and their ontogenetic parallels, we learn its embryology. And this in brief is the whole of the necessary distinction between the structural, the functional, and the genetic psychology of will. The structural

psychologist reduces will to an attitude "always made up of three elementary processes, sensation, image, and affection" (Titchener, 84, p. 520); the functional psychologist defines will as "an instinct which foresees its end" (Ebbinghaus, 22 p. 86); and the genetic psychologist describes will as an event that "plunges its roots into the profoundest depths of the individual and, beyond the individual, into the species, and into all species" (Ribot, 69, p. 114). From whichever point of view the psychologists examine will they report their findings in the sequential order in which the events studied uniformly take place; and this order is customarily termed causal. In the genetic study of conscious experience, the psychologist sees a point where teleogical responses to situations take place. Increasing complexity in the functional activity of the organism in response to the increasing complexity of the conditions of life has brought about awareness. Further progress in the same direction leads to the memory awareness of the end before the action begins, to the awareness of the nature of the response required by particular stimuli as soon as the stimuli appear as sensations. Then follows the simultaneous awareness of several possible actions. There is the delayed response, called deliberation, during which the various possibilities rise and fall in conscious clearness until one receives the feeling of assent and the action follows. The choice stage in progress has been reached. In the choice process the various possible reactions are held up as imaginal presentations; they are compared in the light of all past experience and knowledge in any wise obtained, in psychological terms, there is an ascription of meaning. This may all pass off quickly and as like situations are presented frequently an habitual form of response may be acquired, but whenever some new factors complicate the situation, the choice process again occurs. This process, plus the emotion aroused by the recall of past experience, inhibits certain and permits other actions. There is no more the mechanical reaction to the stimuli present, but for it is substituted the delayed reaction in the process of which the reaction is governed quite as much, if not more, by the past experience of the individual as by the present situation. When primitive man, or those individuals of whatever species first had the experience, reflected on his choice and recognized that there were other possibilities present at the time, there came the I-could-have-done-otherwise feeling. And as he looked ahead at the new situation just arising with its several possibilities, he did so with the feeling that within him was the power of choice, that he was free to select that which he thought best. It is

conceivable that disappointments and mistakes may have stimulated this feeling. The regretting of an action and the wishing to have done otherwise throws the fact of other possibilities strongly into relief. The first recognition of the fact of unconstrained choice must have been a tremendous impulse. The brute is subject to his environment; but man can change and conquer his environment because he has this power of deliberative choice, and the feeling of personal power which the recognition of its possession gives to stimulate its further use. The feeling of superiority, the feeling of power over conditions, the feeling of independence which the recognition of the value of the choice process gives, stimulated its further use and thus fixed its possession, it made it of selective value and insured its possessor of success in the struggle for existence. This great feeling, which is the feeling of freedom, motivates new conduct, new efforts, and thus makes possible new achievements in the progress of the race. It has released a new source of energy and stimulates its expression in new channels. What it has done in the race it can and does do for the individual. Sometime in the experience of every child or adolescent there comes the experience, attained gradually perhaps, of feeling that he is independent, or could be if he were allowed, that he is a self, an ego, that he can control his own conduct, that he is to be a free soul. With that feeling growth and the overcoming of difficulties are possible. If it never comes, the individual is deficient and ends in an asylum, unless some one by proper treatment can cultivate it in him. If it is crushed out or discounted by disease or sophistication, the individual is handicapped for life or until the feeling is again acquired. From the attainment of this point on the race or the individual makes rapid strides in advance, obstacles are overcome, problems are solved, habits are broken up to be replaced by new when new are needed, a vast new developmental power seems to have been attained. The events in the causal series of the history of man or the race which have this free consciousness as their antecedent are quickly recognized as being far more efficient and valuable; and it is the nature of man apparently to make more and more of it, to emphasize its value and thereby to bring about a greater and greater number of such responses.

Thus we find that freedom is a feeling included in the general treatment of the will consciousness and that it is a part of the causal series, at once both effect and cause. And we find further that it is a most indispensable factor in the human causal series because it is the cause which has motivated the

great achievements. Without it the great advances might have been impossible and the individual who lacks it absolutely is a hopeless derelict. From the psychological point of view it would seem that the whole free will question must take on a different aspect, it must become pedagogical. Philosophical disquisitions no longer suffice. The feeling of freedom is a state of consciousness to be carefully cultivated.

The intensity of this feeling in any individual depends upon the perfection of the native endowment, on the vitality and on the individual experience. If the native endowment is defective or weak this all-important feeling of superiority to constraint is discounted, the personality is less well knit together, is lacking in potentiality, lacking in differentiation, is flat-faced, plastic, and consequently the responses to situations are simpler and more direct. There is a diminution of the choice processes of consciousness, at least in their effectiveness, and the individual is proportionately more constrained by every situation. The power of initiative is diminished. If there is a strong native endowment, a powerful developmental nisus, there is not only a strong feeling of personal power, as there is a feeling of weakness in the case above, but also the conduct of life will be more positive, there are more complex and indirect reactions, more and surer choice processes in consciousness. There is more initiative, more assertiveness and power to rise above immediate situations. This difference is commonly manifested in the daily contacts of life, but it is peculiarly demonstrated in cases of melancholy, where there is a feeling of helplessness and resignation. But a good heredity does not always insure health. If disease, unhealthy surroundings, bad habits of eating, sleeping, working, and thinking, the use of drugs and dissipation condition growth, the best of heredity can be wasted, and the same condition of lassitude, weakness and passivity be developed. If the activities of life are checked, a similar result may be produced. If the child or youth, or even the adult, is repressed constantly, frightened into submission, not allowed the freedom and practice of self-expression, then the feeling of personal power and capacity is stunted, undeveloped, rudimentary. Good heredity, hygienic culture and habits, and freedom for directed self-expression are equally necessary to the feeling of freedom and personal efficiency. The lack of any one may be overcome by the others, but all are to be desired and worked for. Depression due to lack of vitality or ill health of any kind is likely to injure the feeling, while the cold intellectual mechanistic con-

ception of nature is dangerous because it retards and inhibits effort, crushing the will to choose.

If this discussion of free will is characterized by the smug complacency with which most articles on this subject conclude, implying that the final word has been spoken, the writer is apologetic. He is keenly aware of the fact that much more knowledge is necessary before the final answer may be scientifically given to the problem; but it seems established that the ethics taught in college must present the freedom of will as a vital evolutional and developmental factor. The aim must be for both teacher and student to develop the great fundamental underlying feeling, if there is to be moral progress. To this all that makes for healthy heredity and completeness of life applies, hence from this point of view eugenics, euthenics, and the crasser practicalities advocated take on value. All that develops the spirit of power and self-confidence is indispensable.

III Place of Hygiene in Ethics

Enough has already been said to make clear the ethical importance of health. But hygiene can and will produce more than the feeling of fitness and the ability to act freely. The very process of attaining a healthy, harmonious functioning of the organs of the body, not forgetting the brain, relieves the individual of some of the temptations mentioned by removing the provoking conditions. And hygiene belongs in the instruction in ethics, because the best of health is a part of the social demand for morality and a necessary condition of moral efficiency. That concept of moral health which includes only the attainment of personal morality in the narrower sense, which means only that the individual is free from the guilt of moral sins of commission, will not be tolerated in this day when moral progress is the slogan. The concept must include the capacity, interest and actual coöperation in the fight against immoral conditions. In an epoch of moral renascence, in a time when posterity is considered, when practical eugenics even is discussed, and when every effort is being turned by many to the moral improvement of conditions which need generations for complete reform, the individual must be fitted to coöperate in the moral progress, to facilitate evolution, not merely to be a greased cog in the machine, moving easily when others push; he must help in the push. This means abundant health and the efficiency now so much in demand. It means that hygiene must be taught and its practice stimulated for its moral value, and not alone as a science for academic interest.

The ethical significance of hygiene is not new. Some of the older ethics texts even include a little personal hygiene, as Janet, and Hopkins (47 and 42). But emphasis coördinate with the modern demand has rarely if ever been incorporated in the pages of a text book. Those who have written ethics texts have usually been philosophers who cared more for historical problems and metaphysical implications than for the moral health of coming generations. A change is evident, however, in some of the recent texts; but concreteness and the broader aspects of hygiene are still to be included. Years ago President Hall attempted it with results which warrant the use of these emphatic words: "I have begun a course of ethics with lower college classes and for two or three months have given nothing but hygiene; and I believe the pedagogic possibilities of this mode of introduction into this great domain are at present unsuspected and that, instead of the arid, speculative casuistic way, not only college but high school boys could be infected with real love of virtue and a deep aversion to every sin against the body" (34 Vol. I. Chap. 5). "Hence plain talks on sleep, toilet, food, dress, exercise, recreation, regularity, sex regimen and heredity, training, interest in periodic weighing and measuring, with a good deal of discussion about diet and nutrition,—these I believe should be the basis of the moral teaching of the young." If the demand of the times is to be answered much of this kind of thing must be included in the college ethics. The college scrap heap now being raked over by the efficiency expert is revealing a vast amount of human material ruined, and a vast amount of good human energy gone to waste through bad hygiene. The unhygienic life of many students is a familiar matter. Where there is so much waste, some of it must be through ignorance. But whether this be so or not, good teaching might inspire to a reform which would save some of that which is now lost. Modern efficiency studies, so far as work is concerned, are very largely applications of long established principles of hygiene. And modern hygiene is discovering new principles whereby the student and all who work or live may work and live at a higher maximum of efficiency. It is this which society is demanding, and it is this which the highest principle of ethical thought, loyalty to the race, demands. The world is now coming into a third great physical renascence. Two others have written in history, that of the Greeks and that led by Jahn in Germany. Roughly it may be said, with much truth, that the first made Greece and that the second made modern Germany. To what superman the modern physical renascence

is leading only the history of the future can tell, but that such a movement exists only the blind could deny. The force and extent of it often fails of appreciation. The physical fads, the get-strong-quick schemes, the out-door sleeping porches, the interest in the fight against disease, the many societies and committees for health reform of all sorts, the millions of dollars invested in gymnasia, public baths and bathing places and playgrounds, and the thousands who make use of them, out-door magazines and health literature beyond enumeration, revival of folk-dancing, participation in sports, rapid increase of demand for physical trainers, not only in our own country, but even in China, India, and South America, societies for sex prophylaxis, eugenic movements, school hygiene literature and committees, efforts for national vitality, etc., etc.,—are but a few of the indices of the modern health crusade. And the whole has a vast moral significance. The college which does not read these as the signs of the times and adjust its course in ethics accordingly may not only find the moral and physical efficiency experts battering down its own doors but may also lose a magnificent opportunity to be of real vital influence in moral education.

To be sure many colleges already have courses in hygiene and where such is the case ethics is relieved of a part of what would otherwise be its burden. But the plea here is that the hygiene taught must be with a moral significance. If only the scientific facts are given in the hygiene course, then the ethics must build upon it, make the moral applications and inspire to practice in a way which the bare scientific teaching may not have attained. There need be no danger of wasteful repetition. The two courses, where they exist, may supplement each other and make each the more effective. From this point of attack ethics becomes frankly biological. Yet it leads to no crass materialism, but rather, as Sutherland has shown, to a most inspiring comprehension of the fullness and grandeur of morality. By leading back to the biological, it leads out to the cosmological aspect which arouses that great fundamental religious interest, aroused originally by reverence for nature. Fear of the bioligical trend reverberates the old theology which condemned the flesh. The modern esteems the body and gives it its rightful place; and thus a biological ethics comes into harmony with the modern Christian concept of life.

The simpler principles of cleanliness, toilet and the like are learned before the college years are reached, but the student rarely learns by home training or by social contact the art of using his body so as to produce the maximum of mental

and physical work, and with it the euphoria which accompanies healthy functioning. Lack of this knowledge is one of the greatest sources of supply for the college scrap heap. The students broken by dissipation of one sort or another are largely the product of this ignorance. The boner who forgets to exercise and stays over his books until the early hours of morning is quite as likely to seriously injure himself as the happy loafer who while rarely troubling a book, keeps equally late hours and wastes his energy through dissipation. Perhaps both do so innocently; doubtless much of the physical misuse in college is innocent or even well meant. Some students overwork themselves with studential and social duties and obligations. They get their work and play and duty all mixed up. The value of alternate periods of work and rest needs to be presented and applied, or the application stimulated. The well-known law of Mosso and Maggiora that " work done by a muscle already fatigued acts on that muscle in a more harmful manner than a heavier task performed under normal conditions " (59 p. 150) should be shown and its mental correlate demonstrated. Prove to the grad-grind that he can do better work and more work by taking proper rest and exercise. The value, too, of spurts, of periods occasionally of extra exertion, need to be included, for by such spurts the organism is stimulated to grow and to make the structure necessary for harder work. Occasional forcing thus has its value as well as regular rest. The differences, too, between morning-workers and evening-workers have their application and importance. And so, also, does diet deserve much emphasis in the course. Where some students are starving themselves to make ends meet and others are filling themselves with indigestible foods and ruining their systems with liquors, there needs to be inspired an attitude of reverence for the digestive system upon which we depend for the preparation of the material from which we get the energy to live and to work. The results of careful experimentation with alcohol and other stimulants should be included that there may be no misunderstanding or hasty generalization concerning their value. The student who is inclined to use drugs for crams and special seasons needs to know that the new lease of energy is fictitious or misleading, that it has to be made up for later, and that the regular use of drugs reduces the power to do mental work. The morals of oxygen supply need dwelling on. The neurological aspects of oxygen supply, the work of Verworn and others, and the various tests of work done, may inspire to the better care for ventilation. Recreation needs hardly to be men-

tioned, one would at first think, when the cry is that the college youth does not do work enough; but the importance of regular exercise for all does need emphasis. Its moral value needs to be stressed and applied not only to college life but to the conditions of life into which many of the students are going. The explanation of fatigue and its effects should never be omitted. The unnecessary fatigue from overwork among the more able students, which sometimes occurs, has already been referred to. When this fact is added to the statement made by Irving Fisher that fifty per cent of the people in this country are suffering from over-fatigue, the importance of instruction concerning fatigue becomes evident. There is the danger of incomplete recovery, the increased susceptibility to infection when fatigued, the greater loss by working in a fatigued condition, etc., which the student should know and know well. If illustrated by the known physiological effect upon the nerve cells, the fact of fatigue becomes the more impressive. But the effect on character is the most essential. There is a relaxation, the bars are let down and the power of self-control is discounted. In the fight for character a bad case of fatigue may so relax control that the gain of weeks may be lost in minutes. And this makes the ethical treatment and consideration of fatigue imperative.

Without the broader aspects of the hygiene problems, such studies may tend to the cultivation of self-centeredness. As there is danger in constant moral introspection, so there is danger in constant consideration of one's own physical condition. The practice of hygiene must become habitual. But in order to make the impression deeper, without the danger of too great emphasis upon the individual and in order to orient the student for the eugenic aspect and the cultivation of personal interest in the larger moral problems, the national and racial aspects of hygiene should be included. As the morals of the individual depend in large part upon the physical condition; so must the morals of the nation, as a collection of individuals, depend largely upon the health of the nation. The moral and efficiency value of national vitality and the means and possibilities for its improvement can thus be linked to the individual studies and make the individual the more responsible. Metchnikoff's scheme for the prolongation of life and the elimination of old age is more than a dream, and his optimism is the spirit to be desired in our college youth. Prof. Fisher's report (26) on national vitality is a thesaurus of information and references for the teacher who wishes to include this material. The moral and economic loss to the country by the reduced vitality of the 2,000,000

syphilitics, the 500,000 tubercular patients, and the 3,000,000 cases of malaria each year (Fisher's statistics), besides the vast number of other preventable diseases and the slight but equally preventable ailments is too stupendous for comprehension. But it is the inspiring fact of their preventability which needs to come before the student. Because the tuberculosis death rate in England is now only one-third of what it was seventy years ago, because typhus fever has been practically stamped out, because the ravages of small pox, yellow fever, and typhoid have been checked, there is good reason for the motto of Pasteur: "It is within the power of man to rid himself of every parasitic disease." In this the developing social consciousness is appealed to, the biological aspect of being a part of the race and of assisting it in its problems is aroused. Sympathy and honor in their best and fullest sense are appealed to and it is these characteristics which are most to be desired. The cultivation of health, personal and social, is the immediate aim in this kind of instruction but the ultimate aim is the stimulation of these fundamental moral qualities. (In the appended bibliography are mentioned some of the most practical works on hygiene, those written from the personal, community, national, eugenic, and ethical standpoints. See numbers 1, 15, 16, 28, 50, 66, 71, 87, 89.)

IV Eugenics and Sex Instruction in Ethics

Modern Christianity, socialism, hygiene, efficiency and the growing social consciousness has directed popular as well as scientific attention to the improvement of physical conditions of life. The effort is to give all a chance to live and to live well. Resignation to wrong and suffering in this vale of tears as a preparation for eternity has changed to aspiration for the realization of heaven on earth. The progress of science and its wonderful conquest of the powers of nature plus the growing recognition of the meaning of evolution has brought the realization that present conditions may be improved indefinitely and that it is possible to cope with retarding forces and facilitate the progress of human evolution. It has forced a recognition of immortality as due not only to an undeveloped social consciousness but also to the physical and mental deficiencies of certain members of society. The attempt to do away with mental, moral, and physical deficiency has directed attention to its source with the result that the newer science of Eugenics has sprung up. The aim of this new science is to seek out and to control the sources and biological forces which make for or against the efficiency

of life. It is not content with the expenditure of time and thought in the correction of criminals when they find that the criminality is due to hereditary mental deficiency. In the words of its founder, Francis Galton, "Eugenics is the science which deals with all influences that improve the inborn qualities of a race; also with those that develop them to the utmost advantage" (30). The ideal is to substitute for natural selection an artificial selection which shall breed a higher race of man, every member of which shall be physically, mentally, and morally fit. Although the scientific principles for this may be drawn from biology, sociology, and other sciences, the spirit of it is essentially moral. The actualization of the eugenist's aspirations depends upon the development of popular feeling. This can only be attained by wide and careful dissemination of the facts and in doing this the ethicist should feel himself under moral obligation.

Eugenics is new and to many repulsive, but the repulsiveness is due chiefly to misunderstanding. The facts which the enthusiast for practical ethics is obliged to face make an inclusion of eugenics imperative. Davenport states (17) that there are 300,000 insane and feeble-minded, 160,000 blind or deaf, 200,000 annually cared for by hospitals or Homes, 800,000 prisoners and thousands of criminals not in prison, 100,000 paupers in almshouses and out, constituting from 3 to 4 per cent of the entire population. When one realizes that a very large percentage of the blind and sick here reported are so because of venereal disease, one begins to realize the magnitude of the moral problem involved. Rentoul reports similarly staggering statistics for England (68) Davenport continues by estimating the cost to this country annually of all this deficiency: 30 millions for hospitals, 20 millions for insane asylums, 20 millions for almshouses, 13 millions for prisons, and 5 millions for the feeble-minded, deaf and blind (17). But the cost cannot be estimated in dollars and cents. Morally the financial cost is great because a large per cent of that money might have been invested for the furthering of various movements for moral improvement. It is greater still, however, because of the moral drag which all this deficiency exercises upon the race. The social worker knows perfectly well that many prostitutes are deficient, and therefore lead the life they do. But it is still further known that these deficient reproduce themselves and so keep up the stream of immorality both through heredity and through the effect of the environment into which they bring offspring. Statistics in proof of this criminal or deficient heredity are rolling up to an incontrovertible degree.

Davenport gives the case of an insane man who had two mentally weak wives by whom he had 13 children all mentally weak. With these cases of mental defectives, he presents charts showing the apparent hereditary nature of maniac-depressive insanity, the neurotic diathesis, Huntington's chorea, heart disease and other diseases. He shows at least that the marriage of those who possess such defects reduces in the offspring the resistance to such disease and increases the susceptibility to these diseases and defects, "There is," he says, "so far as I am aware, no case on record where two imbecile parents have produced a normal child" (17 p. 15). His appeal is that everything possible should be done to "dry up the springs that feed the torrent of defective and degenerate protoplasm." And Goddard's extensive studies confirm Davenport's statements. In a recent paper (31) he reports the studies of several family histories. One of these has 319 members of whom the facts are known and out of this number, 119 are feeble-minded and only 42 are known to be normal. The Volta bureau in Washington has reported the results of a study of over four thousand marriages of deaf and find that this defect, too, is hereditary (25). Yearsley in England recently reports a study of 284 cases of deaf-mutism of which "33.09% were undoubtedly the result of marriages either amongst those who had cases, direct or collateral, of congenital deaf-mutism in their families, or amongst those who were blood relations" (90 p. 310). Rentoul reporting from the English census returns says that "on one day alone we (the English people) had 65,700 married or widowed idiots, imbeciles, feeble-minded, and lunatics in the United Kingdom, many of them engaged and, by us, encouraged in the, to us, apparently pleasant function of begetting degenerate offspring, in fouling the stream of human life, and in adding to the sum-total of insanity" (68 p. 41). But the marriage of defectives of this sort is not the only group who are bringing defectives into being. Rentoul, Saleeby, Metchnikoff, Fisher and the rest all mention alcoholism, and venereal diseases as tributary. The predisposition to other diseases and the effect upon the offspring of alcoholism and venereal disease is well reported, but the actual extent of them no man knows. Fisher quotes Morrow as saying that the elimination of social diseases would probably make one-half of our institutions for defectives unnecessary, and adds that "in the opinion of very competent judges social disease constitutes the most powerful of all factors in the degeneration and depopulation of the world." (26 p. 36). Fisher reports also several studies concerning the effect

of alcoholism one of which finds that over 80% of crime, 48% of pauperism and 35% of insanity are due to the use of alcohol. Luther Burbank condemns this crossing of bad species as "a crime against the state and every individual against the state. And if these physically degenerate are also morally degenerate, the crime becomes all the more appalling" (11 p. 59).

It is evident that if by some means the germ plasm becomes defective it remains so and that the offspring continues to be defective, a burden and a moral risk to the community. It is a man's moral obligation to care for and make the most of the unfortunates who are already brought into the world; but for the sake of efficiency, moral economy, and moral progress they should not be allowed to bring others into the world. Yet the eugenist goes further and advocates the arousal of a spirit which shall control the mating of youth. This seems at first, and to many, as an idle dream; but the fact remains that sentiment does control the nature of matings to the elimination of some. Sentiment has brought in the rule of monogamic marriage; sentiment prevents the marriage of brothers and sisters and to a considerable degree the marriage of cousins; and sentiment very largely prevents the marriage between different races. There is equal reason to think that sentiment may be developed which will prevent the marriage of the unfit. The eugenist would have the young consider the parentage and health before marriage. Their idea is to keep the "germ plasm on the upgrade." If this is to be realized, it must come through instruction.

The ethical significance and importance of eugenics has become patent, but the best methods for its presentation have not yet been determined. Some suggestions are, however, possible. The more biological phrases must be linked closely to the course in biology if not handled by it. Building on the Weismannian theory of the continuity of the germ plasm and on the spirit of Burbank's Training of the Human Plant, the significance of a defective germ plasm and the dangers of crossing with it or allowing it to breed can be made impressive. From the study of evolution the student can be led to see the vast advantage possible to the race of an intelligent selection substituted for the older natural method. Spencer's law of the decrease of birth rate with the progress of civilization, as contrasted with the Malthusian theory, (well presented by Saleeby 72), is an excellent basis for dwelling upon the importance of cultivation of the race by seeking quantity of quality. Few suggestions will be necessary to show to the average youth the application of all this.

It is almost sure to stimulate personal application because of the tendency of later adolescent thought in such matters. It means emphasis upon hygiene personal and social, to keep the self well and the germ plasm healthy. But it also means that youth shall think, as they anticipate marriage, of the health and antecedents of the one to whom they are attracted, and that pride in vigorous health for the good of the race shall be cultivated.

The problem of sex instruction is then immediately involved. The need of such instruction has already been pointed out in a previous section of this paper and the flood of literature upon the subject during the last few years has made the need generally recognized. This, too, is fundamentally and fearfully ethical. So many false ideas get abroad among students that they are in danger of acquiring a false philosophy of sex. Knowledge alone can combat this. Of it Prof. Hodge says after years of teaching: "My experience with college men encourages me to believe that in connection with thoroughly sound eugenic instruction we can straighten them out for life on this point so that in the marriage relation they shall feel that they 'must be sure to observe the order of nature, and the ends of God' (Taylor)" (41). The eugenic aspect transfigures the sex problem and makes possible the treatment of it and the consideration of it with all the reverence of religion. It comes to the cosmological aspect of ethics; it touches the widest bounds of life and the most fundamental emotions. Relating sex thus to eugenics and religion makes possible the cultivation of that feeling of honor and self-respect which must be the new authority in conduct for the youth. When brought face to face with the facts of sex and sex hygiene as related to his own happiness and the welfare of the race, the student must inevitably have aroused within him a strong self-feeling which will force far more personal applications than the teacher will make. To each the problem is or should be sacred and its sanctity should not be too far invaded by instruction. Enough needs to be said to cover the general facts and to inspire personal interviews. The needs of each are likely to be so peculiar that the personal contact is far more to be sought. No general prescription is adequate. In all it must not be forgotten that the instruction is to be given for the sake of the student's future as well as for present needs. It is to be expected that the healthy among the students will one day be parents themselves. The responsibility of that position needs to be emphasized. Spencer in a classic passage has ironically shown the apparent consideration of the

teaching of child culture as of far less significance. The same attitude is fortunately not true today, not to the same degree. But when the prophylaxis societies are bewailing the ignorance of parents, it behooves the college teacher to see that the next generation are not likewise ignorant. For the sake of the children they will bring into the world and educate, they need to know the anatomy, physiology, hygiene, and psychology of sex. And they need to know the best times and the best means of giving such information to their children. This point of view as well as the eugenic adds dignity to the subject. Much of this should have been learned previously in other courses; but if it has not, it needs to be given in ethics. In such event it may be wise to call in some one especially equipped for such instruction; and if the college is co-educational, to divide the class. But the needs are such that the teacher should be equipped with all necessary information on these subjects.

Voluminous as the literature upon the subject has become, its pedagogy remains still an unsolved problem. It is undoubtedly wise to put something into the student's hands which can be quietly and thoughtfully read over, but whether this something be a book or a pamphlet is still a question upon which there is no consensus of opinion. The writer is inclined to think that it is better not to place a detailed book in the student's hands. It holds the attention too long upon the one topic, and if it is purchased, it remains upon the table or book shelf where it will be taken up at intervals. The student who has had wise home and school instruction from time to time needs no such book. And the student whose education in these matters has been neglected is morbidly interested. For the latter, a book is too fascinating and exciting. Leaflets seem to be better. They are cheap, can be given away, and little time is spent in their perusal. They are read and then if not thrown away are easily covered up and lost. The attention given to them is brief; the instruction needed is obtained and the matter dropped. It must always be assumed, however, that the student will be called upon some day to give others instruction, and for this reason enough should be said about the work and publications of the best sex prophylaxis societies so that in case of need they can be resorted to. For the same reason the best books upon the subject need to be referred to and described. At present, in the writer's opinion, the best series of pamphlets is that issued by the Spokane Society of Social and Moral Hygiene, Spokane, Wash. Theirs is a graded series, and at present is the only such. The value of the grading is obvious. The Rhode Island Fed-

eration of Churches and the Massachusetts Committee on Sex Hygiene (Boston) publish three pamphlets each, which are excellent and very much alike. One of the series is for young men, one for young women, and one for the venereally diseased. The well known New York Society of Sanitary and Moral Prophylaxis now publishes six different pamphlets for students, parents and teachers. One of their recent publications, How My Uncle, the Doctor, Instructed Me in Matters of Sex, is a valuable addition to the English literature of sex instruction. It was written by Dr. Max Oker-Blom, a professor in Helsingfors, and has since been translated into ten different languages. It outlines for the student in an attractive manner, how through flowers, fishes, birds, and animals, the first sex instruction may be given to a child. There are now several good publications for this purpose. The two little books by Miss Lowry (51 and 52); one, Confidences, for girls, and one, Truths, for boys, are excellent; and the two by Smart, What a Father Should Tell His Son, and What a Mother Should Tell Her Daughter, are almost equally good (78 and 79). For the youth, or later adolescent, the supply is not so good. W. S. Hall's two books (36 and 37), From Youth into Manhood and Reproduction and Sexual Hygiene, are good for the young man, but there are none equally good for the young woman. Much of the literature produced for these purposes is too full of presentations of the horrors of venereal disease, of personal prejudice of some sort, or is characterized by a lack of knowledge of adolescence. The teacher of ethics must of course know all of these and many others. If he should desire a more thorough knowledge of the sex problem he can turn to Forel (28), Scott (73) and the medical literature. Northcote (62) presents similar material with a clearly expressed religious feeling. If suggestions for the teaching of sex through biology are wanted for the untrained parent or teacher they are to be found happily presented in Miss Morley's book, The Renewal of Life (58). There seems now to be a consensus of opinion among those who have examined carefully into the extent of and dangers from venereal disease that some instruction concerning these diseases should be given to all. This to be done not only as a warning against sowing wild oats but also, and much more, as a means of arousing caution in the face of the fearful possibilities of accidental innocent infection. And for the sake of moral reform and self-protection something too must be included about the facts of the white slave traffic. Much material on these two topics is to be found in the literature already mentioned and in the references they contain. Unfortunately much of the literature on venereal disease and the white slave

traffic is more likely to create phobias than foresight, and this is the danger to be avoided in its presentation. An excellent book on these two topics is that by Lavinia Dock entitled Hygiene and Morality (20). In this the facts are adequately presented and yet in a manner as slightly repulsive as it is possible to handle such a topic.

The sex problems can be easily over emphasized. They need to be included; but too much detail should be avoided. The effective instruction is that which arouses feelings of self-confidence, self-respect, aspiration to the responsibilities of parenthood, and Christian sympathy.

V. Preparation for Moral Efficiency

In the preceding sections the aim has been for the ethics taught to develop feelings of moral and physical power, honor and self-respect; now, honor and self-respect must be even more sought for, and with them the moral enthusiasm which expresses itself through coöperation in moral progress. The aim must be to supply, in large part at least, that lack of a sense of proportion in honesty, truthfulness, justice and moral obligation characteristic of the college adolescent. By showing both the principles and practice of moral conduct and of moral reforms and by presenting the material in a concrete manner, the student may be fitted for life in the modern community. He will be so taught that after leaving college he will realize that his ethics was close to the problems of life and not so divorced as much of the ethics of the past has been.

When the social consciousness spreads out in later adolescence, when the developing sympathy reaches out beyond the family group and includes the nation and the race in its benignance, the individual is peculiarly interested in solving the great problems of society. By debates, the study of sociology, reading or by some means the youth becomes easily impressed by the immoralities of the social order which permits various injustices to exist. He sees things in the large, the very large, and overflows with big ideas and Utopian schemes. This enthusiasm loosens up the soil and makes the very best season for sowing the seeds of moral activity. One of these is the evolutionary attitude toward social problems. If the individual is not to relax later into a hopeless indifference toward immorality and injustice in the larger relations and functions of society, he must have well planted that view of life and society which sees it constantly evolving, constantly changing and as such susceptible to reform. Without the evolutionary view conditions would seem hopelessly fixed and the inspira-

tion to moral activity killed. But with it there is inspiration to strive and to eliminate the evils recognized. It furthermore links up to the broad racial religious view cultivated by eugenics. Thus the present moral conditions of society appear no more hopeless than those of the individual. As culture may change the individual character, so progress may change in society what is not possible to wholly overcome in one generation. The evolutionary aspect gives a perspective which makes the presentation of modern social problems easier and more readily understood. Dewey and Tufts after a long experience recommend the presentation of the history of ethics, actual moral principles not ethical theory, as the best introduction because it orients the pupil and enables him to see the problems to be discussed in their social and evolutional setting (19, Intro.), and there comes often with the evolutionary view, as with the eugenic idea, a feeling of obligation. The individual realizes the significance of his relation to the whole, that what he is can help or hinder, and this feeling of obligation is fundamental to ethical activity.

In bringing the student into the evolutional attitude toward ethical problems stress must be placed upon the family. As an evolutionary and civilizing factor the family stands supreme. Not only must its permanence be insured by such instruction, but from such a viewpoint some of the dangers of evolutional ethics may be obviated. Without some point of orientation the student might well be lost in the sea of evolution, but if oriented by the family, its welfare and preservation, he should be able to steer clear of the dangers which some see in this form of teaching. As the deterioration of family life is one of the great moral problems of the present, it becomes increasingly important that its value to morals and civilization be so stressed. Both as a factor in the preparation for moral efficiency and in the solution of immediate moral problems, the family must be emphasized. Most of our college youth have come from good homes, and in many, if not most, there is deep down in their hearts a love for their parents. Like religion it is often too deep and sacred to be dragged out and discussed, but a tactful consideration of the family and of family ties can be used to rearouse a perhaps momentarily submerged love of mother or of father which will serve as an anchor in the turmoil of moral doubt and change. As a part in his preparation for moral efficiency, the youth needs to know something of the history of the family, how it has come to be, and the steadying force which it has exerted. The inspiring story of Sutherland (82) and the forceful words of Mrs. Bosanquet (7) should be brought to his attention. After such an orientation, the appalling statis-

tics of divorce and the decline of home life can arouse appreciation of the importance of the efforts to maintain the home as a vital institution.

With the presentation of the ethical value of the family and the home is opportunity for the presentation of what is known about the moral training of children. The demand for this needs hardly to be mentioned. The literature is vast (see President Hall's chapter on moral education, 34), and while there is little consensus of opinion concerning the best methods to be employed in the school, there is a considerable body of knowledge produced by the students of child life and by teachers which can be readily applied to home training. All the studies show a world-wide demand for better moral training. Toward this the course in ethics can contribute by preparing the parents of the future. For simpler presentations and for practical use and recommendation Prof. Sisson's recent book on the essentials of character (77) and the books by Mrs. Cabot (13 and 14) are especially worthy of mention.

The preparation for a life of moral activity that is worth while is the preparation for moral efficiency. Part of this has been provided for in the sections on hygiene and eugenics, but only part. The field, conditions, and opportunities for such activity need also to be presented, and to be considered from the view point of efficiency. That in moral activity which is inefficient is by so much immoral. The moral man whose influence is discounted by certain shady practices in business is by so much immoral as well as inefficient. The philanthropy which is wasting trust funds by neglect of accounts and supervision is by so much immoral. The efficiency movement led by experts is turning its light upon all forms of life. The energy wasted by children in our schools in the study of subjects which are afterward of no use or value is being brought to light and the rapid growth of industrial education is the result of the appreciation of that waste. The industrial education has branched out and grown into vocational training. Colleges and universities prepare not only for the different professions but also for callings not hitherto dignified by the name of profession. Efficiency tests and standards are being worked out for the various departments of business, government, education, philanthropy, etc. Allen defines the scope of this movement thus: "Where standards of administration are unsatisfactory; where taxes are too high and buy too little; where schools waste taxpayers' money, pupils' time and democracy's opportunity; where results of religious work are disappointing; where hospitals regularly incur deficits; where crime is neither controlled nor understood; where civic and educational leaders make futile pro-

tests against political corruption; where good intention is permitted to cover a multitude of administrative sins; where charity injures those it aims to help;—efficiency tests will be found lacking." (2. Preface). And here they are to be supplied. Allen's work well represents the spirit and methods of the movement. He proposes to substitute an efficiency test for the goodness test. For him "the good man we talk about so much does not exist; or rather he exists in so many shapes and types that the composite can never be found" (2, p. 2). "There are at this very time good men so bigoted as to believe that all who oppose trusts, protective tariff, high license, are good while all who defend them are bad. Thus it happens that knowing a man to be good, upright, honorable, Christian, furnishes no basis whatever for determining whether he believes in free silver or gold only, whether he is Protestant, Catholic, or Jew, republican or democratic, socialist or reactionary, total abstainer or moderate drinker, a help or a hindrance to his fellowman. Still less does it of itself indicate his suitability for position of mayor, auditor, alderman, pastor, hospital trustee or school superintendent" (2, p. 3 and 4). And he proceeds to apply this rigidly to hospitals, schools, charitable work, prevention of crime, religious work, government, and the making of bequests, showing the methods for statistical reporting and treatment in order to present the actual efficiency of each. This may be in large part economics, but its ethical significance is likewise apparent. If the aim of the ethics course is to have its graduates participate in the affairs of life morally and in the active movements for moral reform efficiently, it must inculcate this spirit of moral efficiency by studying the wrongs, the maladministrations, the mistakes, the frauds, and the means of their alleviation. Its presentation of practical ethics must be from the efficiency view point. President Hadley has presented the problem from the evolutionary moral aspect by comparing the conduct of men of today in private and in public life. In private life, with their families, neighbors, and club associates, men are generally courteous, self-respecting, helpful, unselfish, generous in case of a great calamity, and commit a thousand acts of daily sacrifice the world never knows. But the same men in politics or in business will ruthlessly hurt a weak competitor for money or for office, will be selfish, will be snobbish and servile for the sake of advancement or power, will lie or cheat. And in answer to the question why concludes that "men have been trying to live in peace and harmony with those about them for so many thousand years, that we know what is needed to keep the peace. But there have been so few hundred years since we began experimenting with the present commercial

and industrial system, that we do not yet know what virtues are needed for its maintenance" (32, p. 12). Every muck rake brings up a new argument for the need of moral efficiency and the preparation for those higher and racially newer fields of morality for which imagination is needed. The things which are immediate, which we can see and feel or readily imagine, are emphatically judged right or wrong, real moral emotion is aroused; but the things which come to us only indirectly, which are long circuited, the actual source or effect of which is hard to follow, which tax the imagination, are the things which are not so emphatically praised or condemned. We have not had, as President Hadley says, so long an experience with these forms of immorality and hence they do not arouse such intense emotion. Prof. Ross has happily said (70) that distance disinfects dividends. Unfortunately it does for the many because the distance makes the filth invisible. It is for these problems that the student needs careful and special preparation. He must have seen them in the concrete so many times as to be able to detect at once the wrong involved and to respond readily with the condemnatory judgment. All these immoralities and inefficiencies, these sins of commission and omission, must be worked over until a real and strong aversion is built up. The world into which the student is going is not made of such stuff as most ethics texts are made of, but it is a world where moral problems are hot. He is going into a world where discussions of the highest good, categorical imperatives, and Hedonistic calculus, are overshadowed by falsification of values, short weights, watered stock, bogus mines and medicines, gold bricks, counterfeit money, fake corporations, stock gambling, bucket shops, secret rebating, interference with legislation, evasion of laws and a host of other sins against society. His knowledge of actual morality must be such and the breadth of his social consciousness such that the immorality in all these will be recognized instantly. That character and insight is to be sought which can follow the path of the long circuited effect and responsibility to its end, and which will conduct all affairs municipal, commercial, professional, and philanthropic with the same maximum degree of efficiency. The character which is good because it is efficient both in work and moral conduct is superior even to Allen's efficient man. He would substitute efficiency for goodness only because our standards of goodness have not kept pace with our standards of efficiency. Such being true we need to clean up our standards of goodness and inculcate the best in our students. The best will be superior even to efficiency because, while including efficiency, it will add to it the moral

instinct finding expression in both feelings and acts of sympathy and compassion.

A vast number of youths go to college without knowing or thinking much of what they will make their business in life. Many who go to college with a well-defined plan, change it entirely as a result of the new interest aroused and the broader vision gained. The problem of what to do in life becomes very acute in the later college years. Many who might far better go into other vocations turn to teaching because lesson-getting is the only world they know and they are afraid to attempt the unknown. Vocational bureaus have been established as a consequence of the realization of the fact that so many boys upon leaving the public schools take whatever job they can get; and many times worry through life as a square peg in a round hole. Meyer Bloomfield has recently described the need and methods of this work in an able and stimulating manner (6). But what of the college student? How many of them become square pegs in round holes? Various religious agencies are presenting life work talks to students, and faculty advisers doubtless do much to help the student with these problems. A few institutions have even had courses of lectures on the different professions. But from personal observation in a considerable number of colleges the writer knows that in those colleges a vast number of students know little or nothing of the actual nature of the different vocations. They need sound advice and instruction concerning the opportunities in the different possible fields of work concerning the ethical problems which people in those vocations have to face. Bloomfield says that courses of lectures have been given at Harvard, Boston University, Tufts College and elsewhere "dealing with the occupations and their requirements" (6, p. 65). Aside from the actual possibilities of success in the different callings, which is in itself a great moral problem, there is a peculiar ethical problem wrapped up in each. Take Bloomfield's list, teaching, architecture, journalism, law, commerce, philanthropy, industrial work, business, agriculture, forestry, medicine, special fields for women, art, music, drama, scientific pursuits, politics and public service, and consider them. Each subjects its members to different conditions in which the moral problems are different. The ethics of the medical profession are now being discussed seriously by its members; the ethics of the law is a problem of long standing; journalism is frequently attacked for its apparent lack of interest in morality in the face of its incomparable opportunity to mould public opinion into moral channels; some of the problems peculiar

to business have already been mentioned; and it is evident that the man in the laboratory or the school room, faces ethical problems as different from those of the man in the studio, the pulpit, the factory, the forest, or the chair of office as their moral problems are different from each other. The student should be acquainted with the moral dangers peculiar to his chosen calling before he is blinded to them by the furious struggle to succeed. And when the youth is intensely interested in the problem of vocational choice, there is a nascent period for such instruction. It would make ethics real and appealing. It would give the youth a preperception for moral dangers which might save from calamity. For the sake of mere efficiency his choice of a vocation must be intelligently guided, and a knowledge of the moral problems given, but for the sake of moral progress he must be prepared to participate intelligently and effectively. Preparation for participation in the affairs of state may be included in this as every man must to a greater or less degree assist in government. The relation of every vocation to the welfare of the people at large is a part of the ethics of every vocation. This relation has in ethics more than any other of the so-called practical problems been stressed. It was one of the first to be introduced, as the next section shows, and it is almost invariably included in some manner or degree. But the facts of it need vitalization by an infusion of the concrete.

The vast number of social betterment and moral improvement societies and movements which have grown up rapidly in the last twenty years brings a new department into modern ethics. They not only indicate a recognition of responsibility for the improvement of moral conditions, for the facilitation of moral progress, but they also present a demand for intelligent coöperation and direction. Efficiency is the spirit of modern philanthropy. Efficiency tests and standards are being applied to church work, hospitals, settlements, and the like, with a view to making the time and money invested for moral betterment as effective as possible. The inefficiency of many such movements has been, and may still be in some cases, due to ignorance, indifference, and a feeling that such work should be dominated more by emotion than by sound judgment and knowledge of the best methods. As Allen and others have shown, trustees and directors have leniently allowed methods which would not be tolerated in business. Now that such vast sums are being invested in welfare work there is the demand for effective administration. And this demand is extensive because of the vast number of

such organizations. It means that a large number of people must be able to direct these movements intelligently. Besides this it must be recognized that the college students are to be citizens and parents and as such should be prepared to use the publications and employees of these societies when there is need, and to know what sort of work is done in order that they can suggest and initiate when their community has some special need.

Work for the protection and reform of the morals of child life is an extensive department by itself. The juvenile courts, established now for more than ten years, demand expert thought and direction. The probation system which has grown up with them demands the coöperation of intelligent people of sound judgment and knowledge of child life and social conditions. Both young men and women graduates can if prepared be efficient in such service. College women have been especially effective as probation officers for wayward girls. In the first ten years of the Chicago court over thirty-one thousand children passed before the judge and of the boys put on probation 80% never again came before the court, but of the girls only 55% did not come up again. This is an index of the seriousness of the delinquent girl problem. The thrilling story of Lindsey's fight for the children of Denver should be familiar to every student of ethics (49). Some mention should be made of the work of societies for the prevention of corruption, as that of the New York Society for the Prevention of Vice, made famous by the life and work of Anthony Comstock; of the work of the National Child Labor Committee which is endeavoring to relieve the conditions made by the employment in this country of more than a million and three-quarters of children under fifteen years of age; of the scheme for a children's bureau of the Federal Government for the investigation of infant mortality, delinquency, degeneracy, employment, orphanage, and the like; of the work of Day Nurseries which provide for the children of the unfortunate; and something too of the laws for child protection concerning immoral shows, selling liquors to minors, admittance to pool rooms, distribution of obscene literature, immoral advertisements, for children's courts, and for parks and playgrounds. The efforts for the prevention of the wastage of child life through their eugenic aspects have much of ethical importance. And this, of course, includes the ignorant mother as well as the child. The work of the Kaiserin-Auguste-Victoria Haus in Charlottenburg could well be taken as a model. It has twenty-nine different departments of research, owns its own milk plant and

stables, has laboratories for research, consulting physicians, a school for mothers, an out department, a training school for nurses, a kindergarten course, teaches cooking, washing, sewing, mending, making of children's clothes, the physiology and hygiene of the child, and the practical care of the child. A similar piece of work in Ghent has in a few years reduced the infant mortality from 33% to 4%. In this country the Caroline Rest in New York, some churches, settlements, and societies are doing much the same work although not on so large a scale. And in addition, the graduate going out into the world should know something of the work of social settlements, the methods of institutional churches, Christian Associations, boys' clubs, Boy Scouts, Big Brother and Big Sister Movements, substitutes for the saloon, the International Reform Bureau, and the various agencies with which he will come into contact as a citizen or have occasion to use in the moral improvement of his own community.

And this material should not be presented as so many bare facts. Morality based on a race-old feeling is not easily aroused by reason. But concrete illustrations of the conditions which the various organizations are attempting to fight arouse the moral instinct and make the impression lasting. The teacher should collect a store of such illustrations to be used as occasion offers. If the college is connected with a social settlement, or has access to boys' and girls' clubs, some first-hand knowledge can be obtained by actual participation in the work for moral betterment. Such doing is eminently more valuable than much telling. But there are many fields where doing is impossible and here imaginal situations must be used to arouse the feelings. The heroism of Comstock, the magnificent fight which Lindsey has made, the thrilling career of Jacob Riis, the less-known, but none the less inspiring work of Mrs. Josephine Butler in England, and the campaigns for moral reform led by Hughes, Roosevelt, LaFollette, Folk, Jerome, Heney and others offer a vast storehouse of material which may be drawn upon for moral inspiration. The ethics which does not inspire by great tales from the front of the fight is missing its opportunity. Ethics must burn with the realities of modern moral enthusiasm.

VI. The Ethics Text

President Hall has in an obscure publication reviewed the ethics texts, along with others, which were used from the founding of Harvard down to the early years of the nineteenth century. From this paper we learn that for a hundred years after the founding of Harvard logic came to dominate

the interest of pedagogues. Disputations and the ability to participate in them creditably was ranked of superior importance, while ethical teaching sank into insignificance, "although the forte of the New Englander had always been character." "The works of John Robinson, collected by Ashton, are largely ethical, and treat of health, marriage, liberty, fashions, studies, etc. But after Roger Williams was banished in 1636 and the Cambridge Synod had condemned 82 opinions, the Puritan mind narrowed and darkened down, and morals consisted in Sabbath observance, Bible reading, baptisms and other theological duties" (33, p. 142). The beginnings of an effort to teach morals apart from theology are indicated some years before the Revolution in a text published by President Thomas Clap of Yale in 1765. This is entitled an Essay on the Nature and Foundation of Moral Virtue and Obligations: Being a Short Introduction to the Study of Ethics, for the Use of the Students of Yale College. This 66-page ethics premises that "as moral philosophy makes a considerable part of our academical education and is nearly connected with true religion, it is of great importance that it should be clearly stated and fixed upon the right foundations." Virtue, the text says, "is not by nature but a Divine gift." Yet he discusses several of the chief virtues on their merits, and defends stratagem in war as not lying. Another index of the beginning of a separation from theology is to be seen in the gift of £1,362 by John Alford to Harvard College in 1789 for the establishment of a chair of Natural Religion, Mental Philosophy, and Civil Polity. President Hall includes (33) a lengthy quotation from Alford's will which declares the duties of the chair to be, among others, demonstration of the moral attributes of the Diety, the doctrine of future rewards and punishments, obligations and duties of man to his Maker, "the most important duties of social life, resulting from the several relations which men mutually bear to each other; and likewise the several duties which respect ourselves, founded not only on our own interest but also on the will of God," to the coincidence of revelation and reason on these points, to read lectures on "application of laws of nature to nations and their relative rights and duties," also on civil government. His lectures on natural religion were to be read to all four of the academic classes, those on moral philosophy to the two senior classes, and those on polity to the seniors only.

Ethics was at first sternly opposed. The Calvanistic colonials believed that through religion and not through ethical instruction was moral conduct and character to be attained.

Cotton Mather is quoted as objecting to the employment of so much time on ethics, which he termed a "vile form of paganism." In continuing President Hall says that although taught from the first, not until after the revivalism of 1740 did it slowly advance to a place beside and then above logic. At first virtue was likeness to God and the religious sins of prayerlessness, unbelief, etc., were dwelt upon. There was little change from More's Enchiridion down into the 18th century to Paley whose Principles of Moral and Political Philosophy reached in 1821 its tenth American edition. About the only progress was a tediously controversial transition from the view that morality was a code of laws revealed in Scripture by God to the view that his code was best studied in the innate intuitions and sentiments. This change being due to the influence of Clarke, Shaftesbury, Cudworth, and Hutcheson. Strangely enough not until two decades before the Declaration of Independence, which owed so much to this movement, did the ethical texts begin again, "as they had rarely done since Aristotle, to expatiate upon political rights and duties that though few were inalienable" (33, p. 152). McBride's Principles of Morality was one of the first to have physiological references (published in 1796). President Hall concludes by saying that the Unitarian movement, the anti-slavery movement and other reforms left an indellible mark on college ethics.

Mark Hopkins incidentally remarks in his text-book that Paley's ethics were formerly taught almost universally in this country (42, p. 9). And although his own teaching at Williams is said to have been considered a radical innovation in the eyes of his predecessor, his ethics are well described as semi-theological. His teaching which culminates in his book, The Law of Love and Love as a Law, is a hybrid product of Christian ethics and the Common Sense school; and although published many years after Darwin really belongs to the pre-Darwinian school. Thus naturally he bases his theory on intellect, sensibility, and will, with the moral nature treated almost as a coördinate faculty. All these are but functions of the person, the ego, which has the power of choice. Choice is the object of moral judgment; and obligation is recognition of the right through reason. Less than a third of the book is given to theory, while the remainder is devoted to what the law of love would require us to do, to practical ethics. It is this which made Mark Hopkins' ethics famous, or possibly infamous in the eyes of his critics, and it shows the keen ability of the man to sense the real needs of his students. He presents in lucid terms the duties we owe to ourselves, the duty of perfecting the powers of the mind and the body and

the spirit, care in the formation of habits, duties regarding the rights of others, regarding the wants of others, perfecting and directing the powers of others; also duties from special relations, as the family government, relation of the sexes, marriage, divorce, parents and children, society, etc. The last chapter concerns the duties to God, cultivation of the devotional spirit, prayer, use of the Sabbath, and like topics. Thus did his genius lead him to anticipate much that is now advocated in our modern social ethics. Two other texts which have had extensive use in this country, Hickok's and Janet's, are to be classed with Hopkins', because like it they are chiefly a presentation of classified duties. Hickok's appeared about the middle of the last century (39). For him the ultimate rule in morals is Right. This is ascertained by reason, man's distinctive quality. This ultimate rule of right is simple, immutable, and universal. Submission to this Right is the great duty which involves all other duties. Practically the entire book is devoted to a statement of duties and authorities. The duties are classified and worked out in elaborate detail, seemingly covering every possible question. The authorities presented are the civil government, divine government, and parental government. Janet's text is a cold, dead, cadaverically repulsive handbook of duties. The law of duty is in itself its own aim. "Do as thou shouldst do come what will" is its maxim. Duty being absolute is universal. The law of duty is obligatory in itself and also because derived from God. The whole is a detailed statement of duties of justice, concerning property of others, toward liberty and honor of others, equity, charity, and self-sacrifice, toward the state, professional duties, family duties, bodily duties, etc., etc., each being treated in numerous sub-headings. The absolute nature and assumption of finality in these is oppressive. The individual is seemingly placed under the law of reason, but the laws have already been completely worked out and formulated for all time. All there is left for the individual to do is to meekly submit, take one of these books as his Baedeker in life and attempt to guide himself through each experience according to its dicta.

The American market has been flooded with text-books in ethics. President Hall says in the article just described that "in neither logic, psychology, nor any branch of the great science of man, if in all combined, have there been so many text-books of American make as in ethics." The advances made in ethical thought, the rivalry between the different schools, uncertainty concerning the conclusions advanced, and the unsatisfactory results of its pedagogy are doubtless sufficient to account for the plethora of texts. But the very fact of a superabundance calls attention to its causes, and it will be

seen that they contain the germ of some of those principles which when full grown will make for a more efficient and satisfactory pedagogy of ethics. Besides that written designedly for student use, there is a voluminous controversial literature. Unfortunately some of this has been tried out on the students, and still more unfortunately, many writers of texts have allowed controversial material to slip into their pages. The difference between a treatise for an ethicist and a text for a student ought to be too well appreciated to demand comment. Such books as Sidgwick's Methods of Ethics, Stephen's Science of Ethics and Bradley's Ethical Studies are obviously not texts, and if used as such are more likely to lead to ethical ratiocination than to a real interest in the live problems of daily morality. A recent text by Fite illustrates the confusion of treatise and text. The nature of the work is indicated in the preface where the author himself says that "the work was begun with the intention of furnishing simply a plain statement of the existing ethical situation. . . . But it was found impossible to make a plain statement without adopting a point of view for the definition of the problem and the theories in question" (27). He expresses the hope also that the book will be of interest to those already familiar with the problems as well as of value to those beginning the study. Some books which have been widely used in teaching are avowedly and clearly devoted to some one school or theory; as, for instance, Bowne (8) and Martineau (55). The former's Principles of Ethics is a critique in the form of an extended essay, with theism as the basis and end of his argument. His frequent dogmatism might be condoned, but what excuse can there be for the omission of a bibliography or full foot notes when references are frequent? And not infrequently the references are anonymous.

However quickly the evolutionary theory may have been adopted and applied by certain schools of ethicists, the incorporation of its attitude in our texts has been long delayed. Religious opposition may account in part for this, but doubtless the failure to appreciate at first what the full significance of evolution in ethical science was to be had quite as much to do with it. Evolutional ethics was at first but a modified form of Utilitarianism and this was sufficient to arouse a hindering opposition. Mark Hopkins ignored it and when Hickok's text was revised in 1901 evolution found no place in its pages. Von Gizycki's manual adapted from the German by Stanton Coit (85) shows the Darwinian influence. Paulsen, although rejecting the evolutionistic hedonism which had sprung up, was nevertheless apparently much influenced by the Darwinian theory in the formulation of his own theory of teleological ener-

gism. Muirhead includes a very clear statement of evolutionary hedonism and the points of value and difficulty in it. His section on moral progress, although giving practically no details concerning the evolution of morals, presents very clearly the developmental theory and shows that morals are relative and progressive. Martineau, writing first twenty-six years after the appearance of the Origin of Species and again in later editions, uses evolutionary ethics as illustrative of Hedonistic theories and devotes one chapter to it. Mackenzie, publishing first in 1893 (54), had a broader conception. He presents conduct as evolving from its germs in the lower animals, and a similar treatment of the moral judgment which he conceives as developing from custom through law to reflective principles, from judgments of external acts to that of inner purpose and character, from ideas peculiar to circumstances of particular tribes and nations to ideas that have a universal validity. Brief though this phase of his work is, which today seems superficial, it is nevertheless a herald of what is to come. Although he recognizes the development of ethical judgment, Mackenzie's theistic faith leads him to reject evolution as a theory of ethics. Seth's chief interest is in the development of the personality, and so beyond a few references evolution finds no place in his widely used text. Hyslop's work on the fundamental problems of theoretical ethics, appearing in 1895, recognizes evolutional theory but does not give it much place or significance (46). This delayed recognition of evolution is of course still further due to the lack of thorough presentations of the development of morals and of moral instincts. The monumental studies of these topics made by Sutherland, Westermarck and Hobhouse appeared between 1898 and 1908. Dewey and Tufts have tried to make ample provision for the evolutional attitude toward conduct and for the products of the evolutional studies of morals. Their book is divided into three sections of which the first is devoted to the beginnings and growth of morality. Certain aspects of early group life are first presented; such as, its nature as a political unity and solidarity, as an economic and industrial unit, as a religious unit, etc. Then follow several chapters on the growth of morality through the rationalizing and idealizing process, the socializing process, and the process from custom to conscience. This treatment is amplified by illustration in the Hebrew, Greek and modern civilizations.

For the presentation of the great philosophic problems and the nature of their discussions past and present, there has been no uniformity. Here every man is his own master and each follows the line of his own interest. Generally speaking the less attention has been given to the Greek thinkers and their

theories. But the modern discussions of Utilitarianism *vs.* Intuitionism, Determinism *vs.* Indeterminism, and Egoism *vs.* Altruism are clearly reflected in the texts and sometimes presented at length. Evidently there has been a decided difference of opinion concerning the importance of presenting these discussions to the student. Some like Davis (18) would give an introductory course in the elements of ethics and postpone the philosophical quibbles to a later stage, his aim being to provide the student with "a rounded scheme" of ethics by a careful consideration of his obligations to himself and to society before taking him into the various "and often conflicting views of philosophical moralists." Von Gizycki, in his students' manual, presents ethics as independent of metaphysics and theology, and this point is stressed. Mackenzie, on the contrary, concludes that metaphysics is indispensable. Hyslop has devoted an entire text to theoretic ethics. Not infrequently the texts present a confusing discussion of ethical theory. Perhaps their aim was to avoid the tedium of a thorough treatment of the different schools by a briefer presentation of the substance of the argument between them and what the author thought to be the fallacies in it; if so, the aim was commendable but the result has been a bewildering array of references to unfamiliar names and schools. The mere mention of Sidgwick or Stephen or Kant with a few sentences about their position scattered here and there through a discussion cannot be expected to do more than to create confusion. Mackenzie and Seth are both guilty of this to an unfortunate degree. Paulsen and Hyslop have avoided the difficulty by devoting an introductory chapter to the history of ethical theory. Martineau's work is unique in this field. As the title suggests, Types of Ethical Theory, his aim is to classify the types psychologically and under each type to present the system of some representative thinker; his purpose was not, however, historical but to throw a side light on his own system, hence the systems presented, although representative of his types, do not form a complete historical series. In fact, some of the greatest thinkers are omitted entirely. There is no good history of ethics in the English language either for class room work or for general reference. Sidgwick's little history (76) is much too brief and over-emphasizes the English schools at the expense of the presentation of German ethics. There is an excellent source book for collateral reading by Benjamin Rand (67), which is a compilation of selections from the writings of ethicists from Socrates to Martineau, and there is now a good history of ethics within organized Christianity by T. C. Hall (35). For the more intensive study of particular ethical thinkers of the past, a small

series of condensations from the originals has been started under the editorship of Prof. E. Hershey Sneath. Three of these have been published; the Ethics of Hegel (81), the Ethics of Hobbes (80), and the Ethics of Hume (45).

Every writer recognizes that ethics is based in large part on psychology, and so states it in his text, but the psychology on which each bases it, wherever it is presented, is with a very few exceptions the traditional faculty psychology. The historical antithesis between body and soul, between emotions and intellect has been preserved and will be so long as ethical writers persist in ignoring the contributions of modern psychology. Ethics admits that it is based upon other sciences; hence it has no right to dictate what the nature of those sciences shall be, but to accept from them whatever they say is the truth. And the psychologist has long said that the faculty psychology was false and hence the attempt to determine the relative moral value of intellect and feeling vain and futile. The tendency now among psychologists is to consider emotions and intellect as of the same original stuff or as so interrelated as to be inseparable for purposes of moral judgment. But writers of ethics texts have been slow to appreciate the significance of the advances made in psychology, in spite of the fact that it has thrown so much light upon the processes involved in ethical judgments and the development of conduct. What psychology is given is treated with such an ethical bias that a student coming to a course in ethics after a course in psychology would scarcely recognize the references to the science he had just left. One would, of course, expect the faculty psychology in the older texts like that of Mark Hopkins, but one would scarcely expect it in Murray (61) published in 1891. It is, nevertheless, there and Murray devotes about one hundred and forty pages to what he calls the psychological basis of ethics. But his treatment of the moral consciousness under the familiar three heads, intellect, feeling, and will, is antiquated and superficial. Martineau's well-known Types of Ethical Theory (55) is a specific attempt to present ethical systems from the psychological view point, but as a text for present use it is of course quite useless because its psychology is that of three decades' ago. No psychologist today would classify Plato, Descartes, Malebranche, and Spinoza as unpsychological; nor would he sharply separate Shaftesbury and Hutcheson from the utilitarian and evolutionary hedonists and treat the former as distinctly an ethics of the feeling faculty and the latter as an ethics of the faculty of sensibility. Muirhead in 1892 happily departs from the faculty treatment of will and considers it

as a conscious process. Thus treating it he finds that the moral judgment may apply with equal justice to conduct, self, character, and motive. Mackenzie and Seth, both of whose texts appeared within the next two years, contain but a superficial treatment of the psychological basis. Mackenzie has a section which he calls chiefly psychological, but it is a very general treatment of desires and will, motive and intention, conduct and character, with the suggestion of a faculty psychology. Perhaps there is in this a trace of Martineau. Seth emphasizes the importance of psychology, but his treatment is more ethical than psychological. He moralizes on the significance of deliberation and choice in the formation of character, and stresses habit and instinctive action. On the whole it savors strongly of James' chapter on habit. Davis' whole purpose is different, to postpone the theory of ethics until the student is well grounded in practical ethics, hence his treatment is very brief, apparently it is merely intended to familiarize the student with the significance of the terms, desire, volition, choice, etc. Fite is so absorbed in his own discussion of the classical theories that he has little time for psychology. The Dewey and Tufts text, although it has no section devoted exclusively to psychology, is, nevertheless, pervaded with the contributions of genetic and social psychology. In Mezes' treatment of the origin and development of conscience there is also much of the descriptive genetic method of treatment.

Since ethics came to have a place of its own in the curriculum, there has never been a complete lack of appreciation of the importance of social ethics, although the emphasis and space given to it has depended upon the inclinations and personal interests of the author. Yet there has been an unmistakable tendency toward a greater stress upon social ethics, which may, doubtless, be correlated with the growth of sociology, interest in social welfare, and the general demand of loyalty to the larger group. An interesting and significent index of the early stages of this growth is to be found in the preface to the 1879 edition of Hickok's text which appeared twenty-five years after the first edition. This states that the new edition contains a more complete consideration of the general questions of the state and state authority, with "particular reference to punishment, property, taxation, representation, religion, and education." Strangely enough, however, it still included a lengthy discussion of slavery. Personal ethics, also, in the early texts was stressed, even down to the little details of daily life, but with an arbitrary manner which savors of the heteronomous theological

ethics from which the science was then slowly separating itself. Janet and Hopkins belong to this type. In Martineau the personal and social is involved but indirectly, it is apart from his field and purpose. Although Muirhead has an excellent presentation of theory and psychology, he is peculiarly deficient in applied ethics. Mackenzie touches this field but only that; he says that he has not space to more than mention the personal and social problems. Seth includes some of the problems of social ethics, but like Mackenzie in a rather insufficient manner. His great aim is the development of personality and toward that end all that he mentions is designed. The moral life is treated with insight and sympathy evidently born of much thought and of a great soul, but if one is looking for the consideration of the current moral problems of society and social conditions he does not find it here. Nearly a half of Paulsen, however, is devoted to the discussion of these personal and social problems. Illuminated by his winning style, his lectures stimulate a serious consideration of vital questions. But they are lectures and as such are probably better adapted to use as corollary reading than for text book work. Davis' elementary text is, as has been intimated above, devoted almost exclusively to these topics. His first section on obligation discusses in a descriptive discursive manner and in a carefully-chosen sequence these subjects:— Rights, liberty, trespass, law, sanctions, right and wrong, justice, duty and virtue, selfishness, service, charity, welfare, deity. In this section man is presented in his individual relations, while in the second section he is presented in his social relations and the rights and obligations thereby entailed are discussed under the topics,—family, community, state, and church. In this regard Mezes' text has certain peculiar features. Nearly a half of the book is given to the discussion of objective morality the criterion of which is ultimate sentient welfare. The Platonic virtues of courage, temperance, wisdom, and justice with the addition of benevolence are taken up singly and discussed at length, although the treatment is rather more historical than modern. Under temperance the ethical problems of sex and marriage are included but are discussed in very general terms. Justice is treated at length and almost entirely from a legal aspect. This lengthy legal discussion is at least unusual in an ethics text. Two pages only of the section on justice are devoted to the consideration of charity, in which welfare agencies are mentioned in the abstract. Benevolence is treated historically and analytically, i. e., discussing the various feelings involved, as, hostile, friendly, etc. A chapter on welfare is a discourse in

a rather abstract manner on Hedonism, Eudemonism and national welfare. The emphasis placed in such a text on the importance of moral education for the development of conscience in the child is unique. Dewey and Tufts have two excellent chapters on the place of self in the moral life and on personal virtues. About a third of their text is given to a discussion of conduct as action in society, but instead of attempting a general survey, they find it best to center attention upon three phases of conduct which are of especial interest and importance; namely, political rights and duties, the production, distribution, and ownership of wealth, and the relations of domestic and family life. In the texts generally the presentation of the individual's relationship to philanthropies and movements for moral improvement tends more to be an abstract discussion of principles; and in the consideration of social problems in ethics, politics, as it has often been termed, the presentation, with the exception of Dewey and Tufts', is more abstract than concrete.

A few books have appeared which represent individual departures in the pedagogy of ethics. Among these are President Hyde's Practical Ethics (43), President King's Rational Living (48), and MacCunn's Making of Character (53). The first of these is just what its name implies, a practical ethics. President Hyde includes no philosophical system nor any theoretical ethics; his book is wholly practical and is a short presentation of the virtues of life and the factors in virtuous living. He takes the different objects of life and presents their several phases, namely, as duty, virtue, reward, temptation, vice of defect, vice of excess, and penalty. The objects of life discussed are,—food and drink, dress, exercise, work, property, exchange, sex, knowledge, time, space, fortune, nature, art, animals, fellow-men, poor, wrong-doers, friends, family, state, society, self, God. It is significant that sex is omitted from the text proper and is treated briefly in the preface. President Hyde says, "It is unwise to intrust a subject so personal and delicate to the vicissitudes of a public class-room." He considers this to be the imperative duty of parents and that which he has put in his preface on the subject is in the nature of an outline for parents. The style of the book is aphoristic, brief, terse, and to the point. Motto-like sentences may be picked up at random. The emphasis is rather on the individual, or from the point of view of self-realization, and public morality, or politics, is rather incidental. Welfare agencies and movements for civic betterment are mentioned in the abstract. President King's text is an effort to present or to call attention to the moral aspects, or

contributions, of psychology. He thus presents the importance of habit-forming, mental hygiene, as well as physical hygiene, exercise of body and phases of mental activity, as will and attention, with some slight philosophical and educational suggestions. MacCunn's Making of Character is written from an entirely different view point, but a suggestive one. It is written for schools and training colleges and its purpose is educational. Its scheme is the presentation of the factors and forces to be met and used in the building of character. The first part discusses the congenital endowment and its manifestations in temperament, also the instincts, desires, capacities, development and repression, and habit. The second part concerns the educative influences,— the bodily health, family, livelihood, citizenship, religious organizations, social influences, power and use of example, precept, etc. Another part is on soundness of judgment and concerns the education of the moral judgment, the growth of the individual ideal, the practical value of theory, etc. A fourth and last part presents the facts of self-development and control. It is written simply, clearly, and in a stimulating manner. The aim is for a dynamic rather than a static treatment of facts of the moral life. For the teacher of social ethics there are now several bibliographies of literature for both direct and corollary use: such as, the Harvard bibliography for reading in social ethics and allied subjects (38), that on business morals by Edwards (23), and that by the Fabian Society (24).

Conclusion

Prophecies are proverbially dangerous, but by way of summary and conclusion it may be wise to indicate in brief the probable nature of the ethics text and course of the future as indicated by the facts brought together in the foregoing. It is evident that it can not be a presentation of arid theories, which have so characterized the ethics of the past. In the demand for an improvement of the moral conditions of college life and of the morals of its product is the call to differentiate between the presentation of moral speculation and the preparation for a life of moral activity. It means that the ethics course is to be based first of all upon the immediate and the future needs of the student. If moral philosophy, speculative ethics, is taught at all, it will be presented in an advanced course. The practical must take precedence over the theoretical. The course will be dominated by the spirit of moral efficiency, the preparation for and attainment of efficient moral character. Every effort will be made to clear the path to such attainment over every obstacle. The essence of the great moral problems

of the past will be included because of their reality in the life of every individual, but they will appear divested of their archaic terminology and reference. This to guide the formation of ideals. In the place of the disappearing external authorities will be built up the internal authority, largely unconscious, based on experience, breadth of moral vision, the feeling of honor, self-respect, sympathy and the feeling of personal superiority to anything beneath the most virile of moral standards. The whole tempered and vitalized by the religious spirit and attitude.

As the attitude of fatalistic determinism is dangerous to the moral progress of the individual and to the formation of progressive ethical ideas, it must be combated by a presentation of the fact and the power of the feeling of freedom as looked at by genetic psychology, a position which is at once true to the causal interpretation of science and to the fact of personal influence in the moral progress of the individual and the race. The evolutional attitude dominant in the other natural sciences must be dominant in ethics. But for pedagogical and moral reasons the evolution of ethics needs to be presented with its emphasis upon the family and the home. The evolutional study of ethics. presented rather briefly, will be designed to impress the student with the age and power of the moral instinct and how from the home it has grown out to include the community, the nation and the race. Special stress will be laid on the moral value of the family and the home and the principles of moral education. The moral life will be presented as active, not as the mere passively sinless. The ideal is moral efficiency, which includes in its scope physical, mental, and moral power. For the development of these there must be ample consideration of the facts of personal hygiene which lead out into the larger problems of community and national hygiene. And the newer science of eugenics because of its vast moral significance will find an increasing place in ethics. In its breadth and its ideals it reaches to the depths of the rapidly enlarging social consciousness of the adolescent and can be used to arouse feelings of self-respect, of obligation to "pass on the torch of life undimmed," and of a religious reverence for the vast power of life of which he is a part, and of which a part is to him intrusted. Its reverential attitude toward the phenomena of procreation transfigure the sex problem. Conditions indicate the need of sex instruction and from the eugenic point of view it will have a place in ethics. As a part of the youth's preparation for the morally efficient life, must be included the moral problems peculiar to the different vocations, much of the work and needs of the different agencies for social betterment and moral reform which he may have occasion to use or to coöperate with, and in considerable detail the newer

moral problems, individual, civic, commercial, and political, which are being faced by the world today by virtue of the new social conditions of life.

The new ethics will strive to cultivate efficiency, the broadest and deepest sympathy, and honor, as the all inclusive virtues. It will make a far greater appeal to the feeling side of life than the old ethics, because it will realize that the larger part of the moral life is governed by emotion. And that in the teaching of ethics the more lasting impression may be made if the emotion is aroused. To do this many concrete illustrations of actual cases which have been faced and conquered, or which still remain to be overcome, will take the place of the appeal by theory to the reason. Other factors, too, than the ethics course will be taken into consideration in the control of the development of the students' moral sense. A greater effort will be made to ascertain the actual factors which must impress the student and when so ascertained to direct them in the most beneficial manner. Some of these college problems will be brought into the ethics class as concrete material. The tremendous power of "college spirit" will be recognized and used. As experience is one of the most vital factors in the cultivation of character, modes of expression of the moral feeling aroused will be provided for, and wherever possible within the campus walls as well as without. The students in the ethics course are usually older students and through their activities the college spirit can be moulded. By this means the great power of moral tradition may be gradually changed until it becomes effective as the moral check of public sentiment is in the life of the world, or even more so. The ethical value of college experiences will be recognized to a greater degree and provision made whereby more can participate in them. The thrill of success which comes with victory in athletics, in academic competition of all sorts, in any kind of college activity which brings the applause of fellow-students, will be recognized to have its moral value, and along with it will be cultivated the even greater thrill of personal power which accompanies the recognition of a moral victory. For all this there is needed the teacher of peculiar ability. Mere interest and facility with the ethical philosophies is not sufficient. It will demand a wholesouled individual who knows and loves to deal with the moral problems of the college youth. It will demand, to borrow President Eliot's happy phrase, young men or men who never grow old.

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PLANS OF CLASSIFICATION IN THE PUBLIC SCHOOLS

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Several of the most important plans of grading and promotion in the United States are presented in this paper. Since the short interval, or St. Louis plan, is really the parent of all plans of grading in this country it will be first considered. It will be followed by the Shearer, or Elizabeth plan, which is only a modification of the St. Louis plan. The concentric plan, the North Denver plan, and the group system will then be described, followed by the well-known Cambridge double-track plan and its modifications, the Odebolt and Le Mars, Iowa, plans. The Portland, Oregon, plan is briefly treated. Two German plans will then be explained: those of Charlottenburg and of Mannheim, the latter plan having been widely adopted in Germany.

After a brief introduction, presenting the views of superintendents and normal school principals as to whether the all-class method of instruction is satisfactory as a means of reaching the individual pupils, an exposition is given of the three best known plans of individual instruction, the Pueblo, Batavia, and Newton plans, the section closing with a suggestive plan combining the good points of several that have been presented.

It may be added that there are other plans of grading and of instruction that have attained considerable prominence, but they are so similar in their main features to the plans here presented that it has not been deemed worth while to present them.

The St. Louis Plan

The first comprehensive discussion of the subject of a plan to introduce flexibility into the classification of the graded school system was made by the late Dr. William T. Harris in his reports as superintendent of the St. Louis public schools, during 1868-9 and 1871-72-73. In these discussions he explained the short interval system of promotion as carried out in St. Louis, by which plan pupils, in the lowest grades at least, were to be promoted every five or six weeks during the school year. These three reports aroused wide-

spread discussion among school superintendents throughout the country, some opposing, some supporting. In the report for 1873-74, Dr. Harris entered into a still more detailed discussion of his plan, quoting at length the opinions of several prominent school officials who favored the plan, and also of those who were opposed to the short interval system.

As all the short interval plans are in a way modifications and adaptations of the St. Louis plan it will be well to discuss its chief features at some length.

1. Pupils differ greatly in their ability to do the work of the grades. A pupil entering the first grade at eight years of age can make nearly double the progress that can be made by a pupil of five years of age. The bright, nervous child will be able to advance more rapidly than the one who is dull and stolid.

2. Unless the school provides for these different rates of progress by frequent reclassification, the bright pupils not being held up to work of which they are capable will acquire habits of carelessness and listlessness, while the dull pupil being compelled to move forward at a too rapid pace, will become demoralized and disheartened.

3. Furthermore, the attendance of some pupils is far more regular than that of others, absence being due to sickness, necessity of working for a living, and other causes.

4. Because certain pupils are able to move forward over the course of study at a more rapid rate than their mates and because large numbers of pupils in the upper grades are constantly leaving, some provision must be made to restore the proper quota of pupils to the teachers of the upper grades. This can be done, according to Dr. Harris' plan, by a reclassification and promotion of pupils in the different grades every ten weeks "or once in a quarter or term."

5. Frequent promotion is not to be made by classes, the few best ones in each section or class are to be united with the class or section above. Such a promotion through the different grades will result in bringing together in each section or class pupils of fair, average, and poor ability, together with a few of superior ability who at the time of promotion will stand at the foot of the class. "For a while," writes Dr. Harris, "the average and fair scholars in the class will have the stimulus of being the best in the class. The poor ones will rank as 'middling' and the new pupils will begin as the poorest and slowly work up toward the top of the class. The advantage to the self-respect of the slower pupils which comes from standing in relation to their classmates as abler and better informed is not to be lost sight of."

5. Under this plan where in a large building there are several large sections of the first or second grade, the bright pupils would change teachers several times in one year, but in the upper grades with their small enrollment, the bright pupil would be advanced from division to division, according to Dr. Harris, and still remain one year or more under each teacher.

6. By this plan of promoting the few best, rather than demoting the few poorest, it is claimed that the maximum of encouragement is attained since those remaining in the section after each special promotion do not feel that they have been "left back."

7. If promotions to the high school are made only once a year, the graded schools will be obliged to so arrange their upper classes as to conform to this order of things and the other grades from the first on must follow the same plan.

A class finishing the work of one grade before the end of the year would not be able to begin the work of the next grade until the beginning of the new school year. "The utter want of elasticity in the classification of the upper grades of the district schools," to quote Dr. Harris, "arising from the lack of frequent promotions to the high school, works violence continually to the interests of one-third of the pupils. All those delayed through sickness, the necessities of poverty, or inactive temperaments, either fall back a whole year, or else in a vain endeavor to make up their deficiency overwork themselves or get discouraged." In considering this plan one must bear in mind that it was devised by Dr. Harris as a means of filling up the upper grades of the St. Louis schools which were constantly being depleted by the withdrawal of pupils. It was primarily a plan for hurrying along the bright pupils. "The slow pupils," to use Dr. Harris's own words, "advance only when ready." It is easy to see that under such a plan the bright pupils would be the objective point of the teacher's exertions and the slow pupils would be allowed to drift along. There is reason to believe that even a slow pupil after being passed again and again by his more rapid-minded mates would at last wake up to the fact that he was "stranded" in the stream of progress.

It is maintained that the only disadvantages incident to the plan are connected with the frequent changing of teachers. This objection is dismissed by asking the question if it is desirable to keep a pupil back in his studies in order that he may recite for a long time with one teacher. This answer is hardly fair since there are ways of keeping pupils with a teacher, for

a year at least, while still allowing them to make rapid progress.

Yearly promotions to the high school are said to be detrimental to the interests of at least one-third. Yet there are school systems that have yearly promotions and that make little of "sectioning" the lower grades, where for five years the percentage of pupils failing to earn promotion from grade to grade in the elementary schools, has averaged each year less than seven. The best evidence of the efficiency of the plan would be from the records of the public schools of St. Louis. It is, however, a significant fact that after all these years with the short interval of grading, both in St. Louis and Kansas City, there exists a large amount of retardation in their schools.

The Elizabeth Plan

The Shearer, or Elizabeth plan, of grading was developed and perhaps best carried out during Mr. Shearer's superintendency at New Castle, Pennsylvania. The name, Elizabeth plan, came about from the fact that after Mr. Shearer left New Castle to assume the superintendency of the schools of Elizabeth, New Jersey, he put the plan into operation in the schools of the latter city, but the plan was never carried out in the latter place in any thorough-going manner and is not in use there at the present time. Under the plan each of the eight grades is divided into three or four sections according to the abilities of the pupils. Each of these sections is allowed to do just as much work and go forward just as fast as it is able. There are no promotional examinations and as soon as a pupil shows ability to do the work of a higher section he is advanced to that section. Progress is gauged by the work on the sequential studies, reading and number in the lower grade, language and arithmetic in the higher grades.

The advantages of the plan are stated in Superintendent Shearer's own words.[1]

"1. It makes possible a frequent reclassification which is the only means of preventing the sacrifice of the pupils of the graded school. When a pupil gets ahead or behind his own class, he is at once moved a short distance forward or back, where he can work to advantage.

"2. An accurate grading of pupils, according to ability into classes of from ten to fifteen, instead of herding them in classes of fifty, furnishes a practicable means of reaching each individual.

"3. Every pupil is touched with hope and with enthusiasm; for the progress of each one depends entirely on ability and application.

"4. Forty-two per cent of the pupils in the highest grammar grade, having finished the work of that grade by January, at once started

[1] Discussion N. E. A. Proceedings, 1895, pp. 408-9.

upon the work of the high school, and will be able to graduate in three years instead of four years.

"5. By the end of the first year's trial of the plan, forty-five per cent of the pupils below the high school had gained from one-fourth to two-thirds of a year's work, without any urging on the part of the teachers."

The writer after an experience of several years in schools graded under the plan would make the following criticism of it:

1. It is not essentially different from the plan advocated and carried out by Dr. William T. Harris in the St. Louis schools from 1871 to 1873.

2. It is essentially a plan for enabling bright and often superficial pupils to move rapidly through the grade.

3. Because of this aim, the teacher puts her energies on the best pupils. The slow and dull pupils do not receive the attention that they need.

4. The number of divisions dissipate the energies of the teacher and poorer work is the result.

5. Since there are so many divisions a large number of pupils are engaged for long periods in seat work or "busy work, which often is rendered worse than valueless because the teacher has no time to supervise it properly. Two sections are all that any teacher should be obliged to look after.

This plan has been widely advertised as the result of an article, "The Lock-Step of the Public Schools,"[2] written by Mr. Shearer in 1897 for the Atlantic Monthly and widely commented on by the press of the country. It is also fully explained in a book, "The Grading of Schools," written by Mr. Shearer. The above-mentioned article and Mr. Shearer's book, together with many newspaper articles and addresses by him, have done a great amount of good in calling attention to the need of a better organization of the graded schools in order to adjust them to the needs of the individual child.

The Santa Barbara Concentric Plan

According to this plan children in each grade are divided into three groups so that each grade has A, B and C sections. "The sections do the work of the grade concentrically." The extent of the work so far as the fundamental principles are concerned is the same for each of the sections, but the B pupils do more extensive work than the C pupils and the A more than the B pupils. In arithmetic, for example, the C pupils would take only such work under a certain topic as would enable them to advance to a consideration of the succeeding

[2] Atlantic Monthly, Vol. LXXIX, pp. 749-757.

topic; the B pupils would do more difficult work while the A pupils would approach the subject in a more thorough manner, learning, perhaps, short processes and methods of proof, things beyond the powers of a great many pupils.

When the A pupils of any grade are ready for the work of the next grade they are transferred to the C section of that grade, while there may be constant transfer from section to section within the grade.

This plan was carried out in the schools of Santa Barbara, California. Mrs. Burk[3] has made a very interesting study of the results of the plan, showing the number of sections covered by 835 children during a school year.

No. of Sections.....	0	1	2	3	4	5	6	7	8
No. of Children.....	28	58	195	369	74	75	30	1	5

From this record it can be seen that if we adopt three sections of work a year as the normal, that 34% of the children made slow progress, 44% normal progress, while 22% made rapid progress. In this study it is shown that 35% of the slow children were absent over 20 days as compared with 33% of the normal and 23% of the fast children. It is also shown that in the first three grades 47% of the children were slow, 36% normal, and 17% fast. In the fourth and fifth grades 16% were slow, 53% normal, and 31% fast, while in the sixth, seventh and eighth grades 30% were slow, 50% normal, and 20% fast. This study would seem to indicate the truth of what a great many school men believe, that the course of study for the first two or three grades and that of the higher grades is too difficult for a large number of children. The study also takes the scientific point of view, emphasizing the fact that "the normal child of one year is not the normal child of another year." Other studies along the same line would do much to counteract the evil which many studies in school retardation are now doing by overemphasizing the over-age problem of the schools. The over-age problem in the schools is not to be solved by lowering the compulsory attendance age from seven to six as Superintendent Maxwell of New York City seems to think. School attendance in the German cities where the compulsory age is six makes this evident. The problem of retardation and elimination is as great a problem with them as with us. The studies in retardation have doubtless done much to direct attention in the right way but they are lame and halt in many

[3] Educational Review, Vol. 19, p. 299.

respects. They fail to take account of local conditions in their comparative estimates, judging by the same standard the city in which the children enter school at five years and another city in which the larger part of the children do not enter school until after they have reached the age of six.

Cambridge Plan

The plan of grading that has been most often described in books on school administration is the so-called Cambridge double-track plan. This plan was evolved and was in use in the schools of Cambridge, Massachusetts, for many years. It has now been replaced by a somewhat different plan. It was applied only to the last six years of a nine-year course of study. Under this plan, running parallel with the regular six-year course, was a shorter course by which abler pupils might accomplish the regular work in four years. These four sections of the work were called the A, B, C, and D grades. A pupil entering and completing this course, saved two years in the nine-year course. There were, as can be readily seen from the accompanying diagram, two other ways of completing the course with a saving of one year in each case. A pupil could complete the A and B grades in two years and then at the close of the year be promoted to the regular seventh grade, thus completing the course in eight years; or he might save a year by progressing regularly through the fourth, fifth and sixth grades and then, by being transferred to C grade, complete the work in the two succeeding years. The plan was carried out in this way. All the pupils began the fourth grade on, as it were, the same line of attainment. As soon as possible the pupils were separated into a slow and fast division, the slow division constituting the regular fourth grade and the fast division the A grade. The pupils of the A grade did the work of the fourth grade and about one-half the work of the fifth grade. The next year the slower pupils constituted the regular fifth grade while the faster pupils were promoted to the lower division of the sixth grade and during the year accomplished the remaining half of the fifth grade work and also the work of the sixth grade, so that at the end of the year they were abreast of the regular sixth-grade pupils. In a similar manner the brighter pupils of grade six were promoted to grade C, and by doing a half-year of extra work each of the two succeeding years, finished the course in grade nine with the pupils who began the sixth grade three years previous.

Under the plan there must be two divisions or classes for at least the major part of the time in the fourth, sixth, seventh

and ninth grades. The regular fifth and eighth grades will be composed of the slower pupils and will work as one class.

Objections to Cambridge Plan

The following objections to the plan are presented by a Cambridge teacher:

1. "In order to make fast or skipping classes large enough to make them worth while, it is necessary to place in them children who cannot do the work as it should be done.
2. The children in these skipping classes go over the work so rapidly that they do not get the thorough systematic drill that they need.
3. The selection of the best pupils from the regular classes leaves an accumulation of slowness and the teachers complain of the dullness of their classes.
4. It allows for promotion only once a year." There seems however to be no good reason why in buildings employing sixteen or more teachers this plan could not be fitted to the half-year interval plan of promotions. This could be done by dividing the course of study into two parallel courses: a longer one of 18 sections and a shorter one of 12 sections. The transfer point would occur just twice as often as under the yearly plan.

Le Mars, Iowa, Plan

The Le Mars plan is the Cambridge plan applied to the nine grades instead of only the last six grades.

The courses of study are made out covering the same amount of ground but differing in the time required to do the work; one requiring six years, the other nine years. These courses run parallel with each other and are so arranged that they articulate with each other at different points along the line. Classes are so graded that they come together at different points, thus allowing for a transfer of pupils in either direction without a loss of any portion of the course of study. The short course of six years is divided into three two-year cycles and the long course of nine years into three three-year cycles. The end of each cycle is a transfer point. The grades of the short course are designated by the letters A to F; those of the long course, by the figures one to nine. The plan is worked out in this way: Grades 1 and A begin work together, but soon after beginning the work of the year the two grades or divisions begin to diverge in their work so that at the end of the year grade one has completed one ninth of the work, and grade A one-sixth of the work. At the beginning of the second year the pupils of grade one are pro-

moted to grade two, while the pupils of frade A are promoted to grade B and begin work in the room with the pupils constituting grade three. The early part of the work of grade B is more elementary than that of grade three, but grade B with its abler pupils finally overtakes grade three so that at the end of the year the pupils of the two grades have finished one-third of the course.

Results of the Plan

In June, 1908, 60% of all the pupils in the Le Mars schools were promoted to the nine-year course; 40% to the six-year course; 48% of the promotions were transfers.

In Odebolt, Iowa, where this plan is in use, at the end of the sixth year 54% of the pupils were in the nine-year course and 46% in the six-year course.

The record of promotions made in the Odebolt schools for the four years ending June, 1908, is as follows:

Regular promotions in the six-year course.....	34.5%
Regular promotions in the nine-year course	29.3%
Transfer promotions	35.5%
Non-promotions	1.7%

For this period 29% of the pupils worked altogether in the six-year course; 22% altogether in the nine-year course, while 49% worked in both courses. The lines in the diagram represent the different actual courses as the resultant of the two parallel courses articulating. Course 1 is the regular nine-year course. Course 2 takes a pupil through grades 1, 2, 3, C, D, E, F, completing the work in seven years. Course 3 carries pupils through grades 1, 2, 3, 4, 5, 6, E and F, completing the work in eight years. Course 4 carries one through grades 1, 2, 3, C, D, 7, 8 and 9 in eight years. Courses 5 and 6 are each seven years in length. Course 7, eight years, and Course 8 is the regular six-year course. Thus, beside the two regular courses there are three seven-year courses and three eight-year courses. Under the plan there are four kinds of promotions: the "regular" promotion by which a pupil is passed from one grade to the next higher in the same course, the "transfer" promotion by which a pupil is placed in the next higher grade of the opposite course occur at the end of the year. The "advanced transfer" promotion by which a pupil is transferred 4 to D out of course to the next higher grade of the opposite course (such a transfer necessitates skipping certain portions of the work) and the "retarded transfer" promotion by which a pupil is placed in a

lower course and given the benefit of a review before taking up advanced work (but without loss of time) may occur at any time during the year.

The intervals that separate the different classes may be seen from the following table:

TABLE OF INTERVALS BETWEEN CLASSES

Between Grades.	Time.	Interval.
4 and C,	Beginning of year,	Zero
4 and C,	End of 3rd month,	4 weeks
4 and C,	Middle of year,	6 weeks
4 and C,	End of 6th month,	8 weeks
4 and C or 5 and C,	End of year,	12 weeks
5 and C or 6 and D,	Beginning of year,	12 weeks
6 and D,	End of 3rd month,	8 weeks
6 and D,	Middle of year,	6 weeks
6 and D,	End of 6th month,	4 weeks
6 and D,	End of year,	Zero

The table shows that the interval between two classes throughout the course is never more than twelve weeks and for most of the time only four to eight weeks. Thus opportunity is afforded frequently to adapt the course to the needs of both the slow and the quick child. The pupil of superior ability is not compelled to mark time. The pupils of slower development are not compelled to hurry over the work. The course is pliant at all points. The pupil is promoted on the estimate of the teacher and as soon as the work at any point in the course becomes too hard or too easy for a pupil, such pupil is reclassified.

PORTLAND, OREGON, PLAN

A unique system of classification and promotion has been in use in Portland, Oregon, since 1897. It superseded the orthodox eight-grade system with semi-annual promotions.

The course of study is divided into fifty-four parts covering in time eighteen terms of five months each. Promotions take place at the close of each term. A unit composed of three terms is called a cycle. While classes are permitted to go forward at the rate best suited to their powers, the two standard rates are three parts per term for the slower divisions and four parts per term for the faster divisions.

The normal class interval at the beginning of a cycle is three parts of the course of study measured not in time but in work. In large schools the class interval is often only two

parts of the course. Sometimes in the lower classes only one part of the course separates the classes.

At the beginning of a cycle such pupils as have reached the same point of progress in the course of study are classified in two divisions; the first division is to advance at the rate of four parts per term while the second division is advancing three. It can be readily seen that by going forward at the same rate, at the end of three terms, the first division will have covered twelve parts of the course and the second division will have covered nine. At the end of each cycle each first division will have reached the same point in the course as the second division next above. Again a reclassification will take place and the first and second divisions will begin another cycle and so on in like manner until the fifty-four parts of the course are completed. The pupils who remain in the first division throughout the course will complete the work in seven years. Those who remain in the second division throughout will complete it in nine years.

North Denver Plan of Instruction

Superintendent James J. Van Sickle, now of Springfield, Massachusetts, devised a plan while superintendent of the North Side School of Denver, Colo., for producing "greater flexibility in class management, especially in the grammar grades." He contended that "the short and varying intervals in the primary grades together with the half-year interval in the upper grades were sufficient for the ordinary class organization of the school. The finer adjustments in individual cases should be made within the class. No mechanical plan of grading can adjust itself to the individual differences of the pupils." "The child," says Van Sickle, "who is strong in arithmetic may show less strength in language, while another, good in both, may need more time in geography or history, and so on in indefinite variety,—while the average strength of the individuals composing the class may not vary greatly. No matter how carefully we grade, we find these differences."

The ordinary recitation is ill adjusted to the varying gifts of the pupils: if the bright pupils' ability is made the standard of class speed the average and the slow are hurried on too fast; and bright pupils lose interest and develop wasteful habits, if the standard is adjusted to the abilities of the average and slow pupil.

"Is it not possible," says Mr. Van Sickle, "to retain the manifest advantages of the class recitation, so often set forth by Dr. Harris, and yet as the recitation progresses allow in-

dividual pupils to drop out and do other work more profitable than simply maintaining the semblance of attention?"

AIMS OF THE PLAN

1. To secure a more profitable use of the pupils' time.
2. To train each pupil to use his own judgment by co-operating with the teacher in deciding what he had better do at a given time.
3. To lead the pupil in this way to put forth more willing effort in the mastery of the less agreeable studies, such effort aiding to keep the pupil up to the level of the class.
4. To secure more study time in school and thus do away with the need of keeping after school (staying after school, says Van Sickle, is quite a different matter).
5. To enable the pupil to demonstrate his fitness for special promotion.
6. To bring about conditions that will awaken enthusiasm for improvement in efficiency and in knowledge, by emphasizing the fact that it is individual power, the excelling of one's self, that counts, rather than class marks, special seats, or the other school rewards given for excelling one's mates.

The main aim is thus to develop individual initiative and responsibility by leading the pupil to decide for himself when he is ready to do certain work or when he has finished such work, and to develop the will power necessary to do a piece of work alone. Under the usual plan of organization the teacher makes all the decisions; the pupils have no opportunity to develop independence of power that comes through making choices of real value. It is for this reason that the school-room is often inferior in its educational power to the athletic field; in the schoolroom the pupil is too often being developed; on the athletic field he is developing himself. It is the self-activity,—the subjective power that counts for most in education.

Procedure in Carrying Out the Plan

There is a certain minimum requirement in all studies to which all pupils are held.

While the pupils who need all the assigned time to complete a particular study are engaged upon such study, the more

capable pupils "are, by process of natural selection, detaching themselves temporarily from the class in order to work on some study in which they are weak, or for broader or deeper study of some topic by means of reference books, gathering illustrative material, or following out some line of interest approved by the teacher." (In North Denver each room was provided with a carefully-selected reference library of from fifty to seventy-five volumes).

Those pupils who have been excused from the recitation may at any time be called back to the recitation to help in the clearing up of some point for the other pupils, being in this way at all times held responsible for the work that is being done. In case such a pupil fails to respond at any time either in advance or review work, such failure is held as indicative of the fact that he has not attained such a degree of efficiency in the minimum requirement as to permit of a continuance of his release from the regular class work; this release is therefore canceled. Such experiences tend to stimulate the pupil to make his mastery of the subject more permanent, not for the day only. In this way the pupil's judgment is developed.

"A pupil may at any given time find the minimum in arithmetic or geography all that he can do while at the same time he is making a fuller study than some of the rest, of a period in history." For this privilege he is willing to work more energetically in the subjects in which he is less able. It is easy to see that here there is an opportunity for the school to foster in a systematic way the bent of individual pupils.

Individual pupils may be called upon from time to time to give the results of their extra reading or research to the class. In this way may be cultivated the desire for social service. The pupil gives the results of his work to the class. He is making himself socially useful. "His success awakens a desire in others to be able to make creditable contributions of the same kind; thus all are stimulated to do independent work in spare moments and to find spare moments for independent work. They learn how to find things in books. This is perhaps the most useful accomplishment that we can cultivate in a child. Books must always be his chief reliance after leaving school."

Characteristics of the Plan

It is not a rapid transit plan for hurrying pupils over the course of study.

The class is ready "with an even front" to attack each new lesson.

The new lesson is first developed with the class as a whole.

One pupil does not travel faster than another, but he may get more. The road is wide as well as long. "It is not so much to the pupil's advantage to go through the grades rapidly as to get all that he is capable of getting while he is going through."

"The plan tends to even up the pupil in the various studies, since making pleasant excursions in favorite studies is conditioned upon fair attainment in all studies."

The additional study time makes less home work necessary.

The teacher has more time to devote to the less able pupils without injury to the others.

It tends to develop the latent powers of the pupils.

It gives the teacher an opportunity to judge of the fitness of individual pupils for promotion to the next higher class.

It thus gives opportunity for really able pupils to be promoted whenever they show the requisite ability.

In a class that is well graded every pupil will find some study from which he may be released now and then. The plan is thus a source of encouragement to all. It stimulates steady growth in the pupils. The motives held out of spending one's time profitably, of increasing one's store of knowledge, of being socially useful, and of gaining the power of self-mastery, are of the greatest value.

The plan demands of the teacher more thought and a somewhat broader preparation than the old plan. But there is compensation for the extra expenditure. The "active spirits" in the room are kept profitably employed with self-imposed tasks. The spirit of work thus gained solves nearly all problems of discipline. The plan requires that the pupils be given more freedom than is customary but, as Van Sickle points out, the seeming perfect order of the old-time school room with everybody sitting up straight, no whispering, no moving about is not indicative of a good school if every thing is done on the initiative of the teacher.

Below are some of the results as shown by the work for one year:

"In the eighth-grade class this year, 4 have finished, or will have finished, the eight-year course in less than six years, 7 in six and one-half years, 21 in seven years, and 24 in seven and one-half years. Able pupils are not kept marking time, but are advanced whenever they show the requisite strength. The half-year interval does not prevent this. The year interval would add materially to the difficulty.

In the two buildings in which this plan of class management has been systematically tried there has been apparently greater attention to individual needs than in the other build-

ings. One hundred and sixty-one pupils finish the work of the eighth grade this year in three buildings. In one building, 57½% finish in eight years or less; in another, 62½%, and in the third, the one pursuing the ordinary plan, only 37½%."

This would seem to indicate that the plan tends to conserve the interests of individual pupils. There are many points of excellence in the plan that can be used under any system of classification.

The greatest difficulty that the writer has experienced in getting teachers to apply the main principles of the plan to their work lies in the fact that they have been trained in the normal school to think that all pupils must be engaged upon the same task at the same time. They cannot see that there can be class unity without class uniformity. The principles of the North Denver plan tend to do away with class uniformity and to promote class unity. Under it the ambitious pupil is given an opportunity to add to his spiritual wealth and while so doing to cultivate initiative and responsibility, powers that the modern school is charged with failing to develop.

The Group System, which will be described in the next chapter, is in reality only a modification and extension of the fundamental idea of the North Denver plan.

The Group System

The Group System of teaching has been given more or less attention by school men and has attained success in the schools of New York City. According to one writer the Group System has certain points of resemblance to the Elizabeth and to the Batavia plan. It is asserted that while in no sense is it the plan of the old ungraded school yet it does apply to the modern all that is good in the ungraded school plan. It provides a different rate of progress for children of different abilities. It succeeds according to certain of its advocates by placing emphasis on the old-fashioned drill by translating the hum drum of this drill into independent study. The aim is to cover the work assigned in such a manner that every child has a chance to do the work well. The essential aim is not the rapid advancement of the bright pupils, although by its use a bright child may advance as rapidly as he can cover the work with thoroughness. Its real merit lies in the fact that it enables the slow and backward pupil to keep up with his grade.

The plan may be carried out in two ways: on the basis of the Constant Group or on the basis of the Shifting Group.

Under the Constant Group the pupils of the class are formally divided into groups to be maintained for a definite period. The promotions from group to group occur only at stated times. The pupils are classified according to their ability to advance. There are usually two or three groups. This method of grouping requires divisions in nearly all the subjects of the course of study and the pupils in the most advanced group may pass to a higher grade, although they may be unprepared in certain subjects.

Under the Shifting Group, the children are divided according to their power really to grasp a new point. "Thus the teacher may have as many groups as she deems advisable in as many subjects as she chooses. The pupils may not be grouped in all subjects nor is the membership of the groups constant. Pupils may be promoted from group to group any time. There may be two groups in reading for example, and three in arithmetic or language. Occasionally bright pupils may be promoted to a higher grade but this is not the main aim of the Shifting Group. The aim is to make the bright child do thorough, careful, work and to bring the slow child up to the grade standard while the aim of the Constant Group is to advance the bright child as rapidly as possible.

The advantages of the Constant Group may be summed up as follows:

1. It is economical. The bright pupil goes along from grade to grade as fast as he is able, thus making room in the lower grades for the admission of new pupils, thus lessening the demand for more rooms and more teachers.

2. The bright pupil, not being compelled to mark time will retain a greater interest in his work.

3. Standards of scholarship will thus be improved and the membership in the higher grades will be increased.

4. Because of the small groups the teacher will be able to reach individually those pupils who are weak in one subject and thus enable such pupils to advance with their grade.

Certain disadvantages are mentioned:

1. Rushing children through the grades tends to superficiality and lack of thoroughness and is likely to undermine the health of nervous ambitious pupils.

2. The formality of the Constant Group tends to cause the teacher to lose personal touch with the pupils.

3. Acquirement of a certain amount of knowledge is made the standard of advance and undue stress is likely to be placed on tests and examinations.

4. The dull and slow children are likely to be misunderstood and neglected.

The advantages claimed for the Shifting Group are as follows:

1. No child is slighted or neglected. The bright child does thorough work and is kept up to the mark by reviews and drills.

2. He learns how to study and has time to form habits of study.

3. Children in the slow group are given more time for instruction and thus brought up to grade, and pass with their brighter fellows to the next higher class, although they may not have covered as much ground in all subjects.

4. Every child receives personal attention and instruction from the teacher.

5. Since this does not require grouping in all subjects, certain branches may be taught to the class as a whole, thus retaining the advantages of having the class recite together. The studies for grouping are usually reading, arithmetic and grammar.

The method of carrying out the Group System is somewhat as follows:

1. The new lesson is presented to the class as a whole. A short test following the lessons reveals such pupils as have not mastered the new points and so need further instruction.

2. At the next recitation only those pupils are called to the class who failed to grasp the points at the previous lesson. The others, whom we may call Group A, remain at their seats to do extensive study. Those who have been called to the recitation, whom we may call Group B, again go over the lesson of the previous day, attacking it from a new point of view. A test at the end of this period will probably reveal a small number of pupils from this group who have as yet failed to grasp the essential points of the lesson.

3. This group, called Group C, will come to the recitation for a third period of study on the lesson, while Group B will be assigned study work similar to that assigned Group A, on the previous day, and the latter group will be given new work.

4. After the pupils in Group C have grasped the work the class is reassembled and another section of new material is presented to the class as a whole.

According to one writer, the main objection to the plan is the difficulty in arranging for real or study work. Unless such work is carefully planned for and is carefully supervised it tends to foster habits of slovenliness and idleness. Rightly planned for and supervised it cultivates that most valuable of all habits, the power of independent work.

The Charlottenburg Plan

Charlottenburg, the largest suburb of Berlin, has lately reorganized its school system to make it better meet the needs of the children. The school officials have come to the conclusion that a rigid course of study, which all the children are required to pursue, while it may meet the needs of the children in the smaller cities and towns, is not adapted to the needs of the children of a great city, whose mental and physical endowments are the result of such varied influences in both the home and in society at large. They have sought to meet these conditions by adjusting the school organization to the abilities of the children.

The six-year-old children, who are unable to meet the demands of the regular school classes, are placed in small preparatory classes of 24 pupils each and given instruction that partakes largely of the nature of the kindergarten.

Regular instruction for the abler children who begin school work is given in classes of not over 45 pupils each.

Those children who cover the course in this class are promoted to Class Six, the lowest regular class of the six-grade course; those pupils who fail are given the opportunity of entering a class only a half-year below in point of progress.

For the backward pupils the course is so arranged that on finishing the *Grund-klasse* they enter Class Six B. The course for the B classes is divided into half-year sections, thus making promotion or demotion easy. The membership of the B classes is limited to thirty. These B classes correspond to the furthering classes of the Mannheim system. They are separate from the special auxiliary schools which are for children with mental defects.

By means of the selective process in these B classes it is easy to determine the children who need the aid of the auxiliary schools. The Charlottenburg plan makes it possible to individualize instruction at every step of the course and to treat the child according to his ability and his present needs.

As can be readily seen, the Charlottenburg plan is not different in its essentials from many of the plans which have been worked out in our own schools.

The two important features of the plan are the special provisions for private help for such children as are failing in their studies, three hours a week being devoted to this work; and second, readjustment of the course of study by diminishing the amount of abstract memory work and placing greater stress on the concrete things in the child's environment, on drawing and allied work.

The Mannheim System

In Berlin, from 1896 to 1899, only about 61% of the children reached the highest classes of the *Volksschule;* in Charlottenburg, from 1890 to 1900, some 50% of the pupils left school, having covered only a part of the elementary school course. In other city systems of Germany the conditions were still worse. In Mannheim during the last two decades of the last century only about a fourth of all pupils were being carried through the highest grade.

These failures were attributed to overcrowded classes, to over-difficult courses of study, to child labor, to absence, and to frequent changing from school to school. These reasons did not constitute the chief cause in the minds of many school officials; among them was Dr. Sickinger, superintendent of the schools of Mannheim. He attributed the failures to the fact that the school did not take account of the differences in the learning ability of the children. The children in the schools were being treated as if they all had the same powers of mind, hence, the failure of large numbers to profit by the instruction offered.

The Mannheim system of school organization was established in 1899 and is an attempt to remedy the difficulties pointed out above, by adapting the organization of the schools to the needs of individuals.

The Mannheim plan consists of a system of special classes running parallel to the regular classes of the *Volksschule.* In these special classes or "furthering classes" as they are called, are placed those pupils who, for one reason or another, show themselves too weak or too slow to do the work of the regular classes. Such pupils are grouped into classes that form six grades running parallel to the six regular grades. These classes are organized on the same plan as the regular classes and do much the same work, although less extensive. It has been found, however, that a special course of study should be arranged for these six grades.

It would appear from the accounts of the Mannheim system that have been written in English that there is a constant interchange of pupils between the regular classes and the "furthering classes." This is not the actual condition of things in Mannheim.

During the year 1907-8, out of 2354 pupils enrolled in the "furthering classes," only seven gained extraordinary promotions within the school year to a higher grade of the regular classes, and only seven to a higher grade of the "furthering classes." At the end of the year only 123 pupils from

these classes were promoted to higher grades of the regular classes. 1741 were promoted to "furthering classes" of a higher grade, 103 to a "furthering class" of the same grade; 18 were sent to the auxiliary classes and 359 withdrawn from school.

It is clear that the "furthering classes" are almost exclusively for a special class of children who have little hope of gaining the regular classes, only 5.2% of the number enrolled being able to accomplish this end.

In commenting on these figures Dr. Sickinger writes in his yearly report for 1908 as follows: "These results are a confirmation of the view previously presented of the character and object of the 'furthering classes.' The deficiency which is peculiar to the pupils in the 'furthering classes,' shows itself chiefly, not as a gap which has arisen through conditions of neglect in the course of instruction but as lack of ability inherent in the nature of the children." "The capacity of the children for school work," according to Dr. Sickinger, "is in consequence of physiological, psychological, pathological and sociological conditions so variable that it is impossible, as promotion statistics show, to carry forward on a level through the same course of study and within the compulsory school age, from six to fourteen, all children obliged by law to attend the folk-schools."

On this conception the differentiation which characterizes the Mannheim organization is built up.

The pupils are separated, according to their individual endowments, into three groups. The mentally defective, who under ordinary conditions must be sent out from the lower grades as illiterates are assigned to the auxiliary schools which represent in their organization the first four grades of school work; next, the normally endowed children who are expected each year to be capable of gaining a promotion, are assigned to the regular classes of the regular eight-grade course; then those children, who while not abnormal, still are classed as below the average, are placed in the so-called "furthering classes." These classes are the main feature of the Mannheim system. Instead of being carried along with the regular classes about 10% of the children enrolled in the folk-schools are segregated and taught in these "furthering classes," numbering not more than 38 pupils each. Not all German school men are in favor of the Mannheim system. The chief argument against it seems to be that so much extra machinery is not necessary to give the best results both to the bright pupils and also the backward.

Pretzel, writing in the Die Deutsche Schule, makes a strong point of the fact that the gifted pupils are needed in the classes to spur on the backward by their example.

A writer in the Pädagogische Zeitung of August, 1906, criticises both the Mannheim and the Charlottenburg plans. He says that the fault in the system of schools lies in a too difficult course of study which is causing an overtension of the powers of all the children, quick as well as slow. The remedy for this is not a division of pupils into classes according to their mental ability as has been done in Mannheim and Charlottenburg, but a simplification of the course of study so that all but the very few can accomplish it. For these few a second year in a grade will not be a detriment but a benefit. The "furthering schools" are to him unnecessary. "Where," he asks, "is the division of pupils into mental groups to stop? In Mannheim are the three divisions, but Charlottenburg has gone a step further and established a fourfold division. The very bright at the top, then the normal, then the backward and finally those who must be taught in the auxiliary school." The criticism closes with the admonition that among all these charitable arrangements in the school system the normal child must not be lost sight of.

Promotion Classes For Gifted Pupils

Democracy should not keep talent in the quarantine of mediocrity. Thus the discovery and fostering of talent and the setting it to work in the interests of society should be one of the main aims of education in a republic. Society is just beginning to see that equality before the law must not be confused with natural equality. This confusion has doubtless led to some delay in society's concern for the highest development of its human resources. In the old form of caste education, the son could not rise above the station of his father. The fear that a differentiated education would develop caste has, doubtless, led many to assume that in a democracy all should be educated alike. This fear is well founded if the development of superior powers leads, in general, to a drain upon society in the way of wasteful luxury, inordinate pleasure-seeking, and immoral example, evidenced by a degenerate, ease-loving progeny. But democratic society is coming more and more to see that this following of false ideals of life by some of its members is due to its own failure to provide proper educational opportunities for all its children. The people's schools have all along been cheap schools, far too cheap to be educationally efficient. This fact has led Dr. C. W. Elliot to assert that American schools can

never do their work well until the people make some approach to paying for public education what many parents are now willing to pay for the private education of their children. Dr. John Dewey never said a wiser thing than this: "What the best and wisest parent wants for the education of his child that should the community want for all its children." Some writers and speakers, more prominent than wise, are forever dinning our ears with statements concerning the vast sums the nation is expending for education, which in the aggregate seems amazingly large, nearly $400,000,000 for 18,000,000 children; an expenditure, however, when looked at from the individual side of less than twelve cents a day per pupil. Almost no American community spends twenty-five cents a day per pupil for education; yet even the moderate-priced private schools charge at least a dollar a day per pupil for tuition alone.

Public schools can be made better than the best private schools for a reasonable expenditure, but to be reasonable it must be much greater than the present expenditure for school purposes. In many places school officials are kept in office because they can manage the schools on a small expenditure of money, not because they can make the schools more efficient.

Why should it be a matter of surprise for a man of means to send his sons and daughters to the public schools? The reason why public education often gets such scant attention at the hands of legislators, both state and national, is because the leaders in such bodies often have little real personal interest in public education because their own children are in private schools. Witness the penurious policy of Congress toward the National Bureau of Education in its recent attitude toward appropriating some $75,000 for establishing special lines of educational research.

Society can never suffer from the evils of the caste system if it is willing to provide proper education, not cheap education, for all its children, to the extent of conserving and developing human power wherever found. Under this scheme normal, subnormal and supernormal members of the community will each be provided with educational opportunity, and encouraged and aided to develop up to the full extent of individual ability.

Our educational scheme has been organized to fit the average normal child. Until very recently it had never occurred to educators to differentiate the educational scheme to fit different degrees of mental endowment.

In speaking of the establishment of special schools in

America, a German writer in Die Hilfschule states, that their development has been slow because their establishment was thought to violate the democratic ideal of human equality. This ideal has had to give way before the advance of scientific knowledge, especially in the realm of the psychology of the feeble-minded. It is now generally accepted that these mentally weak members of the human family can never by any human means become normal men and women. They can, however, by specially organized schools with a special curriculum and specially trained teachers be vastly improved in their mental, moral, and physical condition, and to a greater or less degree made self-supporting, and by proper supervision made less a menace to society.

Society has of late years given a great deal of study to the subnormal or feeble-minded child, although much remains to be done even here. No doubt much will be done in the next few years in the line of investigating the pathological causes of mental retardation in normal children.

Lugaro[1] points out that "Investigation into subjects in whom the mental deficiency is very slight, into the so-called deficient or backward children, would be of especial interest because they already present from the clinical and psychological sides many differentiating signs which in all probability are dependent on extremely diverse pathological processes." We may thus some day discover the neural causes of backwardness.

On the other hand almost nothing has been done to investigate psychologically or in any other manner the possession of superior mental endowment by certain children.

We do not know how many such children there are in the average community. We do know that about 1% of the children of school age in a given community are so feeble-minded as to need special schools, that from 7 to 10% more (Goddard says 15%) are so backward as to need supplementary teaching in the way of individual help either by special individual teachers (Batavia Plan), by Parallel Classes (Mannheim System), or in the ungraded room (Adjustment Class). We do not know, however, of the 85 to 90% of the school children who remain, how many are gifted with superior mental powers to such a degree that instruction should be differentiated for them.

Dr. T. G. Bonser[2] thinks that "perhaps the worst type of retardation in the schools is withholding appropriate promo-

[1] Modern Problems in Psychiatry, p. 234.

[2] The Reasoning Ability of Children of the Fourth, Fifth and Sixth School Grade. Teachers College, 1910.

tion from those pupils who are the most gifted, therefore of the most significance as social capital." This statement is made as a result of a study of the reasoning ability of children of the fourth, fifth, and sixth grades. Dr. Bonser found that many children of the fourth grade had mental powers superior to many children in the sixth grade, yet the graded system made no provision for the adequate development of these powers.

Dr. G. M. Whipple of Cornell, it is reported, will soon open a clinic to be especially devoted to the study of the supernormal child. In commenting on the fact, Dr. J. E. Wallin [1] makes the assertion that the supernormal child has been most neglected of all, due, he thinks, to the fact that the children on the plus side of the efficiency curve are not so numerous as those who constitute the retarded group, and to the fact that they do not trig the wheels of the school machine. "But the supernormal, or precocious child, is the incipient genius."

Dr. H. H. Goddard[2] in his recent study of some 2000 school children of a certain school system is authority for the statement that about 4% of the children in the public schools possess mental power so superior to the average child as to demand special opportunities in the way of special classes and courses of study for its development. For ascertaining the degree of mental ability or mental age the Binet-Simon tests were used. Children whose mental age was more than two years above their chronological age were considered as possessing mental power sufficient to entitle them to be designated as "gifted." It is to be doubted, however, whether a child who exhibits power to answer the questions three years above his mental level could thereby be considered so gifted as to require special educational advantages without further tests. The child's previous environmental conditions may have played an important part in giving him knowledge sufficient to answer many of the Binet-Simon questions.

The suggestions of Meumann[3] along the line of determining the degree of mental endowment (Begabung) by finding the relation between practice and ability to execute, by establishing norms of performance by which we may measure marked general or special ability in individual cases and by ascertaining the degree of spontaneity that characterizes certain activities and what is closely related, the natural impulse

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[1] See article, Clinical Psychology and the Psycho-Clinicist, p. 123 *Journal of Educational Psychology*, March, 1911.

[2] See article Two Thousand Children Measured by Binet Measuring Scale of Intelligence, *Ped. Sem.* June 1911, p. 236.

[3] See Vorlesungen Vol. II, pp. 375-6.

to certain kinds of work, will doubtless result sometime in standards of direct use to schools.

Dr. William Stern of Breslau says in a recent article that society cannot afford to neglect the supernormal or gifted children. He does not mean by the supernormal the genius in the sense of Galton and Baldwin, but the child "that possesses in quantitatively superior forms capacities that are generally exhibited by individuals at large." According to Stern there are two types of gifted children, the specifically, and the universally supernormal. To the first type belong children who are exceptionally gifted in any one line such as music, mathematics, drawing, or painting, the technical arts, or in the learning of languages; to the second type belong children who seem to be endowed with superior mental powers in all lines of activity. "Those who belong to this group are the great intellects."

Stern cites the investigation which Kerschensteiner carried out on some 50,000 Munich school children to discover those who had marked artistic ability. The children were asked "to make free-hand drawings of specified objects, both from memory and from nature." In this way were discovered some children, in most cases the children of poor parents, who showed remarkable talent, that had in the majority of cases not been properly appraised by the school. Kerschensteiner saw to it that these children were assigned to art schools or arts and crafts schools where they would have the opportunity to develop these latent powers. "But," observes Dr. Stern, "what would have become of these children had not Kerschensteiner chanced to make his experiment? And how much similar talent may smoulder unrecognized in other places where no one thinks of making such tests?"

Stern protests against the practice of prematurely developing children who show marks of talent. These "child prodigy monstrosities" are "often prematurely developed gems of human talent," a sacrifice to the "avarice and passion for fame of deluded parents." "Quiet, harmonious, general development," should be the lot of all children.

J. Petzoldt in a pamphlet entitled, Sonderschulen für hervorragend Befähigte,[1] advocated the establishment of special schools for the exceptionally gifted. He also, according to Stern, suggests that in a large city like Berlin, the twenty most gifted pupils from Quinta (the second-year class in the Gymnasium) (age ten to eleven years), should be sought each year and placed in a special class. "If," says Stern,

[1] Teubner, Leipsic, 1905.

" suitable teachers are found for such classes and schools, and if they are not made too large their achievement may be quite extraordinary."

Groszmann[1] classifies exceptionally gifted children as pathological and non-pathological. The latter type may, as a rule, he says, be permitted to progress in school at their own rate, but there are special times, e. g., certain growth periods, such as puberty, when certain nervous tensions may develop, so that the physical health of such pupils needs careful watching. Under the pathologically gifted, Groszmann includes " the genius, the Wunderkind, and the idiot-savant." A real genius is a Wunderkind grown up. Leonardo Da Vinci was a genius of the general type; Mozart of the particular type. Mozart was clearly a pathological genius. Dr. Groszmann thinks that the following remark of young William James Sidis, the eleven-year-old prodigy who is said to lecture to Harvard professors on the fourth dimension, indicates that he is warped somewhat in his mental make-up. " He remarked one day: ' I wonder whether school children in future generations will celebrate this as a holiday because it was the day on which I began the study of the physical sciences ' "(!)

Barr[2] intimates that " backwardness and precocity in early childhood are indicative of an abnormal ego."

Dr. G. E. Shuttleworth would appear not to favor the attempt to develop the gifted, for he thinks that a marked departure from the normal in one generation in the ascending direction is but too apt to be compensated for by a corresponding deviation downward in the next, or at any rate, in succeeding generations. Nature dearly loves an average.

Galton[3] thinks that the real genius is bound to rise in spite of all obstacles. He says that the best care that a master can take of a genius is to leave him alone.

Hirsch[4] and Baldwin[5] both state that the influence of education upon genius may be important. Says Baldwin, "Many a genius owes the redemption of his intellectual gifts to legitimate social uses, to the victory gained by a teacher and the discipline learned through obedience. And thus it is, also, that so many who in early life give promise of great distinction fail to achieve it. They run off after a phantom, and society pronounces them mad."

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[1] See article The Exceptionally Bright Child, Proceedings Groszmann School. 10th Anniversary, pp. 103-112.
[2] Mental Defectives, p. 125.
[3] Genius and Heredity, p. 34.
[4] Genius and Degeneration, p. 167.
[5] Social and Ethical Interpretations, p. 162.

Provisions for Gifted Pupils in Germany, France and England

The Realschule and the Gymnasium, which the German boy enters at nine years of age and in which an annual tuition fee of about $25 is charged; the lycee, which takes the French boy at ten or eleven and in which he lives, the annual charge being from $80 to $200; the great English boarding schools, which also receive their pupils at about ten and charge for tuition and board about $1,000 a year, are founded on the principle that a certain proportion of a nation's youth needs special educational advantages. These schools provide an opportunity, especially in Germany, for pupils with special gifts to make an earlier differentiation in their educational choices than is possible in the more democratic American schools. This doubtless leads to more scholarly foundations, and to a more efficient training in preparation for certain lines of professional work; this is especially true in the learning of languages. A boy of ten stands the monotony of the drill incident thereto much better and masters the difficulties of pronunciation much easier than does the boy of fourteen, the age at which the average American boy begins such work in the high school.

The German Volksschule has been said by some to lead into a blind alley, but provision is being made in some of these schools, notably those of Charlottenburg and Mannheim, for giving the abler pupils an opportunity to get an education commensurate with their powers. Ziegler[1] puts much emphasis on the right of the child to become something better than the father and different from him. He also says that the upper ranks of society need the new life and fresh blood from the lower social ranks to keep them from degenerating. On the other hand, Ziegler thinks that the schools should be so administered that the rank of the father should not be the means of gaining for the son a cultural or professional education when the abilities of the latter have marked him for an education in some trade. He says: "To advise that the son of Mr. Uppermost or Mr. President of the Government Board become a skillful watchmaker or cabinet-maker would (by the father) be regarded as a downright insult, as it was when I advised a father to allow his son to become a gardener." Yet the good of society demands that this be done in order to avoid producing a "cultured proletariat."

[1] See his Allegemeine Pädagogik, Teubner, Berlin 1905, p. 13.

Provision for the Gifted Pupils Under the Mannheim System

For many years the pupils of the Volksschule in Mannheim[1] have had the option of receiving French instruction three afternoons a week after regular school hours from 4:15 to 5:15 o'clock. There were certain objections to this plan, the chief one was the fatigued condition of the children after the long school day. This led the school authorities to do away with French instruction out of school hours and to arrange for special parallel divisions in the upper grades of the free Volksschule, for such pupils as had shown themselves fitted for the extra study by their industry and the quality of their work, especially in language, and whose parents desired them to take up the extra language. Those pupils were chiefly considered who intended to go into commercial work and would later attend the commercial continuation school where instruction in French is given.

The basal idea of the Mannheim system is the "adaptation of the means of education to the educability of the individual pupils." This new arrangement for meeting the needs of the more gifted pupils is in line with this idea.

The plan went into effect in the spring of 1909 and is carried out according to the following regulations:

1. The curriculum of the classes in a foreign language of the Volksschule is, including the number of hours per week, exactly the same as that for grades VI-VIII of the Bürgerschule.

2. Pupils composing these classes are chosen from the VI-VII and VIII grades of the *Volksschulen* of the entire city, including the suburbs, and receive their instruction in school houses centrally located in the Altstadt.

3. A one-year language course with four hours of instruction weekly, given out of school time (after four o'clock in the afternoon) must be taken by all fifth-grade pupils who wish to enter upon the work of the regular foreign language classes. These preliminary courses are given at the regular schools, the pupils taking such courses being members of the regular classes.

4. Such pupils of the fourth grade as have been regularly promoted and have received good reports throughout may be assigned to this preliminary course at the close of the fourth year.

5. At the close of this one-year preliminary course such

[1] See Mannheim Jahresbericht der Städtischen Schulen 1908-9, p. 21-22.

pupils as have made good progress in French and are also above criticism in the other subjects studied, in the matter of attainment, industry, and conduct are admitted to the regular foreign language classes.

6. Pupils whose work in the foreign-language classes does not come up to the standard are sent back to the regular classes.

Schools for Gifted Pupils in Baltimore, Maryland

Pupils who have done superior work in the sixth grades (with the sanction of their parents) are permitted to pursue additional subjects of high school grade while engaged upon the regular work of the seventh and eighth grades.

The studies generally taken are Advanced English, German, and Latin; in a few cases pupils have been permitted to take some of the first-year Mathematics.

Pupils selected for this work attend a school so located that enough pupils may be brought together to make it feasible to carry on departmental instruction. One such school was started in Baltimore in 1902 with 173 seventh and eighth-grade pupils. There were in March, 1910, four such schools in Baltimore, enrolling 571 pupils of the two upper grades. Selected pupils are allowed to remain in these schools for an extra year, thus being able to complete their high school work in two years. The great majority of pupils from these classes graduate from the high school in three years, their work in the preparatory classes saving them a year in their high school course.

Supt. Van Sickle writes thus of the practical working of the plan:

"By June, 1910, 236 (preparatory pupils) in all will have graduated. Of these, 41 were in the high school proper but two years; 120 were in high school three years and 75 four years. While these 75 pupils who, in the early days of the plan spent four years in the high school did not save any time, they enjoyed marked advantages. They earned 13,050 credits or an average of 174 each; whereas the number required for graduation was only 150." The high school records of these selected pupils, both as to honors taken and as to ability to cover the course in less than the required time, show that the preparatory work has been of value to them.

"The fact," says Van Sickle,[1] "that teaching can not be economically provided for less than three classes makes it

[1] Gifted Children in the Public Schools, The Elementary School Teacher. April, 1910, pp. 357-366.

necessary to organize the preparatory classes in selected centers."

Obstacles to the plan:

Parents do not understand it.

Some teachers are not in sympathy with it because it takes away their able pupils.

Only about a third of the pupils selected as eligible for the preparatory school actually go because of reluctance to go to a strange school.

Plans similar to that in Baltimore are in use in Boston at the Latin School; in Providence, R. I., at the Hope Street High School; at Portsmouth, New Hampshire; at Richmond, La Porte, Crawfordsville, Goshen, Madison, Indiana; at Joliet and Aurora, Illinois; at East Saginaw, Iron Mountain, Kalamazoo, and Grand Rapids, Michigan; at York and Lincoln, Nebraska; at Lead, South Dakota; at McAlister, Oklahoma; at New Orleans, Louisiana; and at Lake George and Warrensburg, New York.

These plans[1] practically carry out what is known as the "six and six plan"; six years of elementary school work and six years of high school work.

The Class Versus the Class-Individual Plan of Instruction

Opinions of Superintendents and Principals

Within the past few months I have sent to many of the leading superintendents and normal school principals in every state to gain first-hand information as to what was being done in the way of training teachers to recognize and meet the needs of individual children; and second, to find out what was actually being done, and also what ought to be done in the school-room in this direction. The results of these returns are to be considered more at length in another section of my study.

One question asked of both Normal School principals and superintendents was this: "Are you fully satisfied with the all class method of school instruction and if not, how would you modify it to meet the needs of slow and backward or other needy individual pupils?"

Of the 54 superintendents and normal school principals who answered this question 45 expressed themselves as not satisfied with the all-class method. One expressed himself as

[1] See article on Preacademic School, in Report of the Committee on School Organization to New York City Teachers Association, New York, 1910.

fully satisfied with the method, while eight gave answers that could not be interpreted either for or against. It will be interesting to read several of the answers as they will form a sort of introduction to the discussion of several plans of individual instruction.

"I do not approve the all-class method. A part of the time of the teacher should be given to individual instruction."

"I believe that in every school from half an hour to an hour per day should be devoted to work with individuals and that this hour should be during school hours."

"I am not satisfied with the all class method and am not using it but a part of the time."

"I would suggest that the pupils be given more time for independent study, during which time the regular teacher should work with the slow and backward pupils, asking such questions and offering such suggestions as will stimulate them to their best effort."

"No, give individual attention to such pupils as need it which includes most of every school."

"The class method of instruction has its obvious limitations. I should not want to abandon the class work, but supplement it with individual instruction."

"I know of no more well developed plan than the Batavia one. But suspect by a more thorough study by a larger number of experts still better results may be reached."

"I suppose the ideal way in which to attack this problem is to work for smaller classes. If this is not practical, then a special teacher to each group of six or eight classes may be the next best thing. Otherwise, in a closely crowded system of large schools each under a single teacher, I believe the best plan to be an unequal division of the class into two sections so that each of the slower pupils may receive a larger measure of the teacher's time than would otherwise be the case."

"I would not modify the class recitation. It is, properly conducted, the best educational instrument the teacher has. Individual pupils should have the teacher's attention outside of recitation."

"No, I like an adaptation of the Batavia system."

"A bit of personal experience may be in part an answer to the question and it may interest you. In 1896 the school committee of Waltham made arrangement with the Normal School at Framingham by which students who had finished their junior year might become assistants in different schools in the city whose need was greatest, to work with backward children. They were paid twenty-five dollars a month. Besides these workers we had an unassigned teacher of ability in the two large grammar schools whose work was with backward children and in doing substitute work in case of absence of any regular teacher. This plan was very successful in reducing the non-promoted children from a yearly average of about 20% to one of five to seven per cent. But in this work we never lost sight of what Dr. Harris and Dr. White call the 'community interest,' of the class as a whole. We need the 'community interest and not factional or group interests.'"

"The all class method is not satisfactory or adequate. This is coming to be universally conceded. We are setting apart periods for individual work. I should judge there might be some merit in the New York City plan of grouping."

"Every teacher should use every effort to help the unfortunate

even if it takes much extra time. I have not been able to devise a panacea for a recognized evil."

"If classes could be made small, not over thirty pupils to the teacher, and ungraded classes could be formed whenever necessary, for deficient children I should be fairly satisfied I think that backward children should have a measure of individual help but any scheme which devotes a disproportionate amount of effort to the dull pupil in an effort to make him accomplish as much as the brighter member of the class is both futile and dangerous."

"I am fully satisfied with class methods. There is no 'the class method' for there are several. A class method that really develops a method in which the teachers' aim in any given subject is to separate the subject into its elements, to arrange these elements in logical order, and then to bring the class face to face with these elements one after the other in this proper sequence and in proper time, is the quickest and surest means of reaching the so-called backward, or slow child."

It is thus evident that probably a large majority of school men are in favor of, and earnestly seeking for, some plan of meeting the needs of the individual children. The opinion last read expressing approval of the all-class plan was rather the prevalent one ten years ago. It is encouraging to know that the trend of opinion is in the opposite direction.

We shall next consider three plans of school instruction that have placed great emphasis on individual instruction: first, the Pueblo plan; second, the plan in use in Newton, Massachusetts; and last, the Batavia system of class-individual instruction. The Pueblo, or Search plan, makes instruction almost wholly individual and is in a way a return to the old unguarded school; the Newton plan has retained many of the good features of the Pueblo and eliminated many of the questionable ones; while the Batavia plan is more systematic than either of the other two in that it assigns a definite amount of time on the daily program which is to be devoted to individual instruction and presents a rather definite technique which such instruction is to follow.

Plans of Instruction for Reaching the Individual Pupil

The Pueblo Plan

The Pueblo or Individual Plan of instruction was developed by Mr. Preston I. Search while superintendent of Schools in Pueblo, Colorado.

The plan is essentially a return to the individual organization of the school which prevailed for centuries until La Salle late in the seventeenth century discovered the value of class instruction. Indeed the individual method existed in Scotland as late as 1886 in some of the very best schools.

Under this plan each pupil is a class going ahead as fast as he is able or thinks he is able. The teacher hears every pupil recite that portion of the work that he has been able to prepare. The Pueblo plan was applied in both the high and elementary schools. The working day in the high school was divided into six periods each one hour long. One regular period each day was given to physical training in the gymnasium, while on alternate days another period was devoted to manual work. This arrangement allowed 4½ hours each day in which to do the work in the regular high school studies. To quote from Mr. Search, "Three periods a day are definitely assigned to the three literary studies carried on together; the additional 1½ hours is regarded as extra to be spent wherever the pupil needs it most, or in some cases according to his individual bent. In the lower classes the assignment of this extra time is left to the teacher; in the two higher classes it is left to the student. In the high school the work is conducted by departments and hence a field program is followed. In grades below the high school, the work is entirely by flexible programs, excepting as certain studies are arranged so as to systematize the time of certain teachers. The studies do not always come in the same order and hence all studies can share in the advantages of the stronger hours of the day. The time is not apportioned by rule, but is left entirely to the judgment of teacher. The working periods are longer than is usual elsewhere. In the primary grades the methods are largely those of the kindergarten. Indeed, it may be added that the entire plan of the school finds its keynote in the application of the principles of the kindergarten to every department of school work."

The class recitation as ordinarily conducted was abolished because it reflected on the honesty of the pupils' preparation and because it wasted so much of the pupils' time. The school was transformed into a sort of laboratory; the office of the teacher was to pass from desk to desk, inspiring, directing and correcting each pupil at his work. The recitation and examination are wholly individual and each pupil, to use the words of Mr. Search, "actually and absolutely recites every chapter and line of his Latin, every section of his other studies, and passes his examination in the most thorough manner." The class exercise is used by the teacher at the beginning of a working period for presenting new principles and for giving general directions.

In the elementary schools the plan is somewhat different. The work of a given class is concerned with some subject, as percentage. Some of the pupils will do a minimum amount

of work, while others will accomplish much that is supplemental. There are no fixed methods; each teacher is allowed to attack the work in her own way. The subjects of the course of study are so arranged that those of each succeeding grade are anticipated in such a manner in the preceding that to pass from the working section of one grade to that of the next higher is not difficult. The flexibility makes promotions from grade to grade an easy matter.

"The plan," according to Superintendent Search, "is intended to care better for the so-called 'backward' pupils. The system of grading that compels the pupil who is behind his class to drop out of school, is not right. Somewhere along the line there must be a place for every pupil, be his advancement or progress what it may. Teachers are instructed to provide carefully for the discouraged pupil and to give more time to the lower half of the school, remembering that the bright ones may always be cared for by supplemental or advanced assignment of work." The advantages and results of the plan, as summarized by Supt. Search, are as follows:

"1. Better health.

"The pupils do their work in school; the other hours of the day are devoted to recreation and the relaxation that comes from change of work.

"2. It results in making trained, independent, self-reliant workers. The pupils have definite work to do, a definite time to do it, and they work under the direction of trained teachers and they are obliged to render an accurate account of the work done. Such work tends to beget self-reliance and independence. Each pupil stands or falls on his own merits. The work is all done at school, no parental help and no helping by fellow pupils.

"3. There is more work accomplished and it is more thoroughly done.

"4. There is more enthusiasm in the work. The dull and listless recitation with the time consumed listening to dull and poorly prepared pupils is done away with. Each pupil realizes that he has a chance to do his best and to advance according to his ability, hampered in no way. He develops a love of work and is filled with the enthusiasm that results from real accomplishment.

"5. There is less discouragement. Every boy and every girl has a place in the school and a chance to do his or her best. There is no such thing as failure to be promoted. Each pupil is promoted each day.

"6. There is more opportunity for additional and outside work. There is time for pupils to read good books, attend

lectures, and to do many other things outside of school that are as much a part of education as school work itself.

"Individual work of the kind mentioned calls for strong teachers, teachers who are more than lesson-hearers, who are masters of their subjects, and ready to point the way to the pupil at any stage of his progress."

We have discussed the individual plan somewhat in detail because school men in general have been somewhat disposed to ridicule it. The plan, however, as worked out by Supt. Search has so many points of excellence that it is worthy of serious study.

That in seeking to obviate the defect of the graded school, Supt. Search was led to slight certain well-established points of excellence in the class-method of instruction and organization, cannot be doubted.

Individual Work at Newton, Massachusetts

We find in the school system of Newton, Massachusetts, the nearest approach to a realization of the ideals for which Search rightly contends in his book, "The Ideal School." Of course, individual teaching is not carried to the extreme which makes it destructive of what there is good in class work, but the individual child is made the focusing point of the whole school system and toward the middle point the teaching power is directed. The work at Newton, under Dr. F. E. Spaulding, is based on the thesis that "such a modification of the rigid system of gradation and promotion is necessary as will make it possible—nay necessary—for each pupil to work as hard, as actively, and as independently, and to advance as rapidly as his sound and well-balanced development requires. It means, equally, a modification which will insure that no pupil be dragged suddenly and kept perpetually beyond his depth in the ocean of knowledge, but that each one, by his own actual efforts, build a stable foundation on which he can advance and rise securely, if ever so slowly."

The plan of reaching the individual is made effective by the employment of unassigned teachers.

The unassigned teacher has no regular class. Her work is supplementary to the class work of several teachers.

"The day's work of an unassigned teacher may be something like this. For the first half-hour in the morning there comes to her room a little group of a half-dozen children from a third grade. The third-grade teacher has selected these children because they are all having difficulty, beyond that experienced by their classmates, with some process in arithmetic, perhaps it is multiplication or division. The unassigned teacher has previously been informed as fully as

possible concerning the condition and needs of these children. The half-hour is spent in discovering still more accurately the peculiar difficulties of each one, and in giving each just the assistance and practice which he requires. This work is individual so far as need be; at the same time the group can usually work together advantageously.

"At the end of the half-hour these children return to their class, and a group of children come from the seventh grade; perhaps there are only four in this group. They are not having unusual difficulty with any subject. Quite the contrary; they need more work and more difficult work than their class as a whole is capable of. Yet they are not fitted to pass at once successfully into the class next above theirs. The unassigned teacher prepares them for this long advance step. She takes them through the essentials which separate the work of their present class from that of the class which they are preparing to enter. To-day, and perhaps for several days, the work is in arithmetic. Other days it will be history, or geography, or grammar.

"When the period is over, these children give place to a group from a fourth grade. The members of this group are neither having unusual difficulties nor are they capable of more than their classmates. They are temporarily behind the work of their class. There has been an epidemic of measles in their room and they have been kept out for several weeks on account of illness or exposure. The unassigned teacher's work with these will be similar in purpose to that with the last group; she will take them rapidly over the essentials covered by the class during their enforced absence.

"The unassigned teacher's fourth period is occupied with a full division, perhaps twenty pupils, of children of the fifth grade. They come from a large class composed of two grades, the fourth and the fifth. To relieve the regular teacher of some of her many recitations, the unassigned teacher takes the work in arithmetic with the fifth-grade division.

"The fifth period is devoted to a single child. He does not belong to any grade, judged by the evidences of ability which he shows when assigned any definite task. So he probably comes from a class in which he is not too conspicuous on account of his size. The unassigned teacher tries patiently to determine just what the serious obstacles in the child's advancement are. He may have to be sent to a special class for backward children. Possibly, with sufficient individual attention, he can work into some regular class."

Thus the work of the unassigned teacher goes on throughout the periods of the school day. Sometimes she works with pupils who are trying to gain a grade, more often with those who are behind in their work and need special aid to catch up with the class, or again, she works with individual children whose peculiarities of mental endowment place them out of adjustment with regular school work.

In Newton there are also unassigned teachers in the high school.

The great drawback to this kind of work is the difficulty in securing experienced teachers who are fitted for this special work. The ordinary teacher by training and experience is so

thoroughly embued with the idea of class teaching that it is hard for her to realize the significance of individual teaching.

The work in Newton is done by the most promising graduates of the normal schools, who, according to Supt. Spaulding, take up the work much more readily than do experienced teachers.

This would seem to suggest a fault in our present methods of training teachers, in that they are given no abiding conception of what individual teaching means. It also suggests a fault in our present system of school organization which is usually so ordered that the teacher comes into contact with the class mind to such an extent that she forgets the individual units and does not possess the ability to reach these lesser units.

At Newton the endeavor has been to eradicate from the minds of teachers and principals the idea that every pupil must begin the work of a grade in the fall and complete it the following spring, and that every pupil who fails must repeat the work of the grade where the failure occurred.

The fact has also been emphasized that real promotion is not a thing which takes place at stated periods but that it is continuous from day to day, if the work of the school is properly individualized.

Promotion is by subjects rather than by grades. The range of variation among the different pupils of a class in the different subjects may be several months. In no case is it more than a year. Frequently the same teacher has charge of a class for two years, while often it is found advantageous to transfer individuals or groups from one teacher to another. The fundamental idea of the whole system is the best good of the individual, not his rapid passing through a number of grades. "Better grasp of subject-matter, better training in independent thinking may mean slower advancement for one pupil than for another."

Yet when the pupils and the parents understand that honest and independent work is what counts and that the school is so ordered that individual achievement is made possible at every point in the course, it is safe to say that as much progress will be made by all pupils as under the plan of rigid promotion and that the progress of the majority, so far as real education is concerned, will be vastly increased. Thus it is seen that at Newton there is no uniform plan of organizing a class for individual work. "Such a plan," according to Supt. Spaulding, "would defeat the very purpose of this work. In some subjects the pupils work, in constantly changing groups, there being two, three, and sometimes even four

groups within a class in some particular subject. Individuals are ministered to according to their needs but the individual works alone only until he can be classified with some group."

Class-work occasionally takes the nature of explanations and discussions on new topics, more frequently the nature of class drills on mechanical work; or again, topics which have been studied by the class-members individually may be taken up in review by the class. The problem work is largely individual, each pupil depending on his own efforts and solving as many as he can.

As a means of advancing from a lower to a higher group, a pupil may do the work of both groups in certain sequential subjects.

The actual working out of this plan is described by principal Charlton D. Miller of the Hyde School District in Newton:

"1. One class, a combination of first and second grade pupils, is composed of fifteen of the most promising pupils of a large first grade in September and the B, or lower section, of the second grade. In all probability, most of the first grade class will enter on third grade work during the early part of the next school year.

"2. In the fourth grade, a group of seven will probably reach the sixth grade in June or early autumn. The plan for accomplishing this is simple and the work not unreasonably hard for the teacher. Arithmetic requires no extra time on the part of the teacher, as the pupils work ahead individually during the regular period for that subject. Language admits practically of the same handling. In reading and geography there are separate divisions.

"3. A group of six pupils from the A section of the sixth grade, working under special provision, will, doubtless, complete the work of grades six and seven and take up eighth grade work soon after, if not at the opening of school in September.

"The entire class is considerably in advance of the grade work. Seventh grade geography will be completed by all members of the class.

"With the arithmetic taken care of by the individual classification, only history and grammar remain to be planned for specially, which is easily accomplished by the teacher without any outside work.

"Grammar is given on alternate days; and the lessons being correspondingly longer, the ground can be covered. Advanced history is given while the rest of the class do language work.

"4. Seven pupils from the A section of the seventh grade are working for an early promotion to grade nine. There is every indication that this will be accomplished in time for the completion of ninth grade work by the end of the next school year.

"Here again the work will be conducted by the teacher in regular school hours, with the exception of geography which is being taught by the special assistant. These pupils have nearly completed seventh grade work in some subjects, and are working in separate divisions in history, geography, and grammar, preparing and reciting on alternate days. History and geography may not be entirely completed by June; and, in that case, study continues during the summer or early autumn, and examinations are taken.

"5. There have been the following cases of recent, individual promotions.

"A pupil has been promoted from the A section of the second grade to grade three, because of conspicuous ability as shown in class work, with evident capacity for advanced work.

"Two pupils have received a promotion from the fourth grade to the B section of the fifth grade because of the same conditions.

"Another typical promotion of this kind was that of a boy from the A section of the fifth grade to the A section of the sixth grade. In a case of this kind, there is some sixth grade geography to be made up. This is directed by the teacher who promotes the pupil."

The Batavia Plan

Class-Individual Instruction

Class-individual instruction, better known as the Batavia System, had its origin in the town of Batavia, N. Y. The history of this origin is very interesting. There was an overcrowded room of some sixty pupils in one of the Batavia schools. By a fortunate suggestion on the part of Superintendent John Kennedy it was decided to relieve the congestion by putting an additional teacher into the room instead of taking a class out. This teacher was Miss Lucie Hamilton and to her rare personality and superior teaching power is due largely the initial success of class-individual instruction.

Miss Hamilton was not an assistant to the room teacher. Her rank was coördinate but her work was entirely different. It was to be wholly with those pupils who for one reason or another were behind their class. She was to work with these pupils individually until they were able to work with the other members of the class. She was to work with the laggards until they were able to work with the leaders. From this individual teacher, class-individual instruction took its rise. For the first time in the history of education a teacher had been assigned to deal with backward pupils in a humane way. Up to this time they had been neglected or else classed by themselves in rooms for backward pupils and with the spur that comes from an aggregation of dulness they were supposed to succeed. Now they were to be kept with their fellows and given the opportunity to succeed. And they did succeed. After a few months of class-individual instruction, it was evident that a marked change had taken place in the first of two-teacher rooms. Pupils who had been considered very dull began to improve, and some of them were soon up among the leaders. There was only one way to explain the really marvelous change. The reason lay in the work of the teacher, who hour after hour, and day after day, had called the re-

tarded and backward pupils to her side to find the difficulties, and to encourage them to overcome these difficulties.

There was a change not only in the working ability of the pupils, there was a change in their attitude as well. The whole atmosphere of the room was changed. All were happily at work. There were no bright pupils with nothing to do, and no dull pupils who could do nothing. The standard of work was gauged by what the ablest pupil could do, and all the pupils were soon well up to the standard.

So the good work went on in that room, and then the test came. Would the plan get similar results in other overcrowded rooms? Additional teachers were placed in other overcrowded rooms, and the results were as good as those of the original two-teacher room. It was thus shown that the success of the plan was not due to the personality or ability of a specially gifted teacher.

The success of the plan was so great that the superintendent and school officials began to think that the two-teacher room, with the combination of class and individual instruction, was the only solution of the problem of the dull and backward child. But after the two-teacher plan had been in successful operation for a year, it dawned upon Superintendent Kennedy that success was due not to the two teachers but to the two kinds of teaching. It was the happy blending of individual with class instruction that was obtaining the results. So after thinking the matter out very carefully, he announced to the teachers of the regular grade rooms that they also were to give individual instruction. He tells us that they looked astonished and asked how it was to be done. His answer was that half the school time was to be taken for individual instruction and half for class instruction. Some of the teachers doubted; some protested, saying they could only get the pupils along by giving all the time to class work and to expect the work to be done by devoting one-half the time to the dullards was simply preposterous.

"Well," said the superintendent, "the only way to tell is to try it. We have the old school plant intact. We have torn nothing down; and if the new plan proves a failure it will be an easy matter to go back to the old way. All I ask is that you give the new plan a thorough trial."

And they did—and no teacher went back to the old plan, and no teacher has ever wanted to go back. In this way the Batavian System had its birth. Its success in the single-teacher rooms was as marked as that in the two-teacher rooms. It met with like success in the rooms where one

teacher taught two grades, and it has met with success in schools where the teacher has many grades.

Briefly, then, class-individual instruction is a systematic plan for helping slow and backward pupils to help themselves. We know that it has wonderful power to open the minds and hearts of children, both large and small, and cause them to unfold and grow. Col. Parker has said that the best results of the Quincy idea was a more humane treatment of little children. The best result of class-individual instruction is a more humane treatment of all children, large as well as small. We have been sacrificing millions of our children to the machinery of the graded school system. We have been trying to mechanize education. Class-individual instruction seeks to humanize this mechanism. It is only sympathy and common sense combined. For years we have been writing and talking about the individual child but we have been doing very little for him. Class-individual instruction does something for the individual child.

The idea of the system is really very beautiful. Here is an intelligent, sympathetic teacher, studying her flock to find the needy ones. She calls these needy ones to her side, one after another, and talks with them, and encourages them, points out their difficulties, and leads them to master these difficulties. She points the way,—she leads, they work and gain the power. The thing most needed in our schools is systematic, sympathetic individual help as an aid to class instruction. The plan we are considering gives this systematic, sympathetic, individual help.

What has the plan done for the children of Batavia?

It has given them the spirit of work and the power to work. The spirit of work is everywhere in all rooms. The pupils, all of them, attack difficulties with confidence and self-reliance.

You know there is a saying that "he who can is king." The children of Batavia *can,* they have power; they can do things; they are kings of their work. They attack diffities without shrinking or cringing; and they master things usually. In case they are not able to master a difficulty, there is someone ready to point the way to mastery. The individual teacher is a leader rather than a helper. She has travelled the road and knows the way. She says to the pupil, "This way, follow me." The pupil follows but does the climbing himself; there is no boosting by the teacher.

The person who thinks that individual instruction means doing the work for the pupil misses the point entirely. The teacher works with the pupil, not for him. She gives him

sympathy in his difficulties, but she never becomes so sentimental as to do his work for him. She encourages him by telling him that the difficulties he is meeting are such as all who have traveled the road of knowledge have met and mastered and they are such as he may master if he will put forth the effort. The successful teacher under the class-individual instruction plan is a sympathetic, patient, courageous leader and as such she develops sympathy, patience and courage in her pupils.

The late Professor Hinsdale, in his excellent book, "The Art of Study," tells us that nowhere in this country is the art of study adequately taught. He then tells us that children must learn to study by studying under intelligent direction. The intelligent direction is the teacher's work. It means directing in the right way, time, and place. Teaching is causing the pupils to learn through intelligent direction. The pupil must do the work, do the studying himself. The pupils at Batavia know how to study and they study. They work and are happy. They have time for study and they use that for study. The great cry all along the line is, that children do not know how to study. How can they know if we do not give them the opportunity to learn? Direct them intelligently, give them something definite to study and then hold them responsible for the work assigned and you will find the children will develop the power to study.

The fault with most teachers is that they help either too little or too much. In one case the result is discouragement; in the other it is loss of power. To let a pupil wrestle with difficulties that he cannot master, is bad; to help him over difficulties that he can master with proper direction, is perhaps worse. Individual instruction aims to teach the pupil how to study by giving him something definite to study, with proper direction in case of need.

The children at Batavia have the power of independent work. There was no deception on the part of the pupil, no trying to tell something that the pupil did not know was right, in the hope that it might happen to be right. This habit of bluffing is perhaps the worst trait possessed by school children to-day. It is the attempt to get credit for something that is not the pupil's own possession. It is the direct result of the present system of class teaching, when the teacher is a tester and not a true teacher; where it is a disgrace to confess ignorance and to say, "I don't know." If a pupil in Batavia does not know a thing, he says so frankly, and is either told to look it up, or at the next individual period he is taught what he did not know. There is no premium placed on superficial

word repetition. There is no attempt to deceive the teacher; such an attempt would fail because the teacher knows her pupil. Her work is teaching not testing. She tests, of course; but she tests that she may teach; she does not teach that she may test. There is a great difference between the two kinds of work. The pupils are working for knowledge and power, not for a high per cent. on report cards. If the plan did nothing more than eliminate deception from class recitation it would be a great blessing.

Some of the chief merits of class-individual instruction are its provision daily for a definite amount of individual instruction and its insistence that this time be given to those pupils who are most in need.

It also lays stress on the fact that instruction is to be given at the point of greatest need rather than on the daily lesson. This is one of the main principles of efficient individual teaching, yet it is the one that it is hardest to get teachers to apply. Real individual teaching goes back, back until it reaches solid ground and there it begins to build.

The plan also provides the supervised study-period. The plan has been criticised because it devotes too much time to the backward pupils. It does devote a large share of the time to the backward pupils because they are the most needy but in case the bright pupil shows that he needs individual instruction he receives his share.

Opinions of Teachers on Individual Instruction

It is interesting to read what teachers who have used individual instruction systematically in the school room for a period of several years say as to the relation between pupil and teacher brought about by its use. Here are some bits of testimony from teachers of Westerly, R. I., where individual instruction is a regular part of the daily work. A department teacher of the seventh and eighth grade writes:

"The strongest argument that I know of in favor of individual work is the opportunity it gives the teacher to win the confidence and understand the personality of the pupil. Especially is this true in departmental work, where, as in my case, there are upwards of one hundred thirty dispositions with which to deal."

Another seventh-grade teacher writes:

"There is closer sympathy between teacher and pupils. The pupil is reached in a way that no other method reaches him."

A fifth-grade teacher:

"Teacher and pupil understand each other better, are drawn

closer by questioning, and oftentimes a study once looked upon as a bugbear becomes one of pleasure and much profit."

A departmental teacher in geography and science:

"I have observed a much more perfect understanding of pupil by teacher and vice-versa. Many cases of discipline have been most pleasantly adjusted through the use of this period. Many unpleasant happenings have been avoided by a timely talk, a suggestion given, or the case at hand clearly put before the pupil. When the way is clearly pointed out many follow carefully. In the case of new pupils, I have reached many through individual periods, have had them interested and reciting well in a short time, whereas I would not have established an acquaintance so soon had it not been for the individual periods. This is especially noticable in the case of children who are timid, who come from other schools, or from environments quite different from that of an average pupil."

A fourth-grade teacher:

"There is no doubt about individual instruction bringing pupil and teacher into closer relations. It broadens the sympathies of the teacher for the pupil. By it, the real difficulties and problems of the child are discovered. I have found children failing from poor sight or hearing, some whose minds were distracted from their work by regularly frequenting the "cheap show," and some who were purely lazy and needed to feel the pressure of compulsory work. I do feel that the opportunity that individual instruction gives me to know my children is very valuable. The personal contact with the teacher should and does mean much to the pupil."

Third and fourth grade:

"As a result of this work there is a pleasant atmosphere in the room. Pupils do not become discouraged. They know they will be cheerfully helped. The teacher is able to know the pupils better, and pointing out his weak points to him while he is near her at the desk is more graciously received than if done in the presence of the whole class. I have never had a pupil who did not accept the individual help in the right spirit."

Mixed room:

"I think as a result of the individual system, the teacher and pupils become better acquainted with each other. There is a closer sympathy and a better understanding. The teacher sees more clearly the obstacles the child has to encounter, and the child learns to think of his teacher as a friend who will help him."

First grade:

"I think that the pupil and teacher are brought more closely

in touch with each other by this system than by any other. I would not have missed the close relationship for a great deal."

These bits of testimony are chosen at random from a considerable number. They represent fairly well the testimony of almost all the teachers who have used individual instruction for any length of time.

In presenting these views no claim is made as to the superiority of the Batavia System over many other plans. It has, however, the one advantage of being systematic. Under it the work is done daily. It is based also on certain definite principles which must to a large extent be common to all plans of individual work, that are effective, which if carried out intelligently cannot fail to win success.

Suggestions for a Plan

A plan approaching the ideal would be a synthesis of the excellent features from many of the plans that have been presented. The work would be based on what might be called a course of study in the fundamentals: this work would be so graded as to be within the powers of all normal children, both quick and slow. To it would be added a course in optional topics to be studied by the abler pupils largely by themselves, in order to develop initiative and self-direction. A record of such work would be made in the pupil's personal record book which should accompany him through the grades.

Beginning, perhaps, at the sixth grade the work would be somewhat differentiated without in the least breaking up the class organization.

For two hours a week on alternate afternoons, as in Switzerland, certain of the pupils would take work in a foreign language while the rest of the pupils could take hand work. The aim would be to keep the classes small, not more than thirty pupils in each of the two lower grades and not more than thirty-five in the other grades. In order to get the number of pupils in the two lower grades, large classes of forty to sixty pupils would be divided, one-half coming in the morning, the other half in the afternoon.

This plan of half-day sessions for the two lower grades has been carried out with success for years in several places. The first grade and perhaps the second would be divided into two divisions of ten or fifteen pupils each. This would reduce the seat work and its supervision to a minimum. Often in the second grade and in all the grades above, the class would recite and study as a whole and during the study

periods the teacher would help individual pupils, usually singly, sometimes in groups of two or three, but rarely more, The chief feature of the plan would be the supervisor of individual work. This teacher would be in charge of the work of four or six rooms. In her hands, would be the school welfare of all the individual pupils in these four or six rooms, but she would care especially for the abler pupils and also for the slow and backward. She would spend an hour or more every day in each of the rooms under her charge, teaching needy pupils whether quick or slow. When an abler pupil had been promoted out, of course she would see that he was adjusted to the work of the new grade. She would also look after pupils coming from other schools to see that they did not lose time by their change. Accompanying the pupils, as she would through a series of years she would come to know each pupil's peculiarities and be able to protect him from the injury that so often comes from a change of teachers. This teacher would, furthermore, have special knowledge of mental defects and be able to advise with teachers and parents, in regard to children with such defects. She would combine with her other work that of the friendly visitor, and thus bring the school and the home into closer coöperation.

Such a teacher could work under almost any plan of grading. The plan of having such a teacher has been anticipated in a way in many places with this difference, the individual teacher has often been a woman of little experience both in teaching and in life. What is wanted is a woman of maturity—a real school mother, who has a cosy corner in her heart for every child, who is imbued with the missionary spirit, and is bound to have every boy and girl under her charge have a fair chance.

With our schools so organized as to grading, following in the main this fundamental course of study, with both the class teacher and the individual supervisor doing individual teaching, and what is still better, personal work, both inside and outside of school (and with the really defective pupils in auxiliary schools), there would be little need of such separation of pupils as that at Mannheim, and there would be the best chance for every pupil to become a self-respecting, successful American citizen, one who could look the world in the face and say, "I am the master of my soul."

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TRAINING TEACHERS TO GRADE

By A. G. Steele, A. M., Fellow in Psychology and Education, Clark University

The question of grading or marking of pupils has attracted much attention recently, and under present conditions, it is likely to receive still greater attention and study.

According to these marks pupils are passed or failed, are given or refused opportunity to continue a study once begun or to enter another in which that study is prerequisite; according to these marks honors, prizes and scholarships of large value are awarded each year. According to them school officials and many other employers select their employees. According to them parents mete out praise or blame to their children, and even fellow students and associates often give or withold social recognition of several different kinds. According to them the pupil is permitted or advised to select this or that vocation. A mark given to a pupil is not a private matter between him and his teacher, but is far reaching in its influence upon the pupil's life. His whole destiny may be changed and even perverted by a single wrong mark. It is not enough that the mark given to a pupil shall satisfy his ambition and the teacher's conscience. It should be rightly interpreted by all who may give him advice or opportunity which may affect his choice of a vocation; and besides, it should not be wrongly interpreted by those who are in a position to offer sympathy, hope and cheer to his life.

School grades, carefully given, might be of considerable assistance in vocational guidance. As matters now stand they are often worthless or misleading. A pupil may develop and grow and learn something from a teacher who uses the poorest methods of instruction and discipline. Seeing her errors, he may learn to avoid them. But if she gives him a high mark in a subject in which he can do but moderately or even poorly, she may influence him to select a vocation to which he is ill adapted and in which he must either fail or not accomplish half of what he might have done in another. This would entail great loss, both to the pupil and to the community, and no one should rise and call such a teacher "blessed." If on the other hand she mark a pupil much too low, she does him an injustice of which any teacher should be thoroughly ashamed. Such a mark might not only deter the pupil from entering the

vocation in which he could render greatest service, but it might cut off many opportunities for promotion in that or any other field.

How then shall we learn to give marks which shall be rightly interpreted by as many as possible of those who need to interpret them?

This problem has already been attacked from several different view points and much light has been thrown upon it. First we might mention the fact that experimental psychologists seemed to find that the distribution of any mental trait or ability among a large group of people is such that there are many more who have that ability in moderate degree than in a very low or very high degree; that mental abilities are distributed among pupils approximately according to the curve of the probability integral. Then Prof. W. S. Hall reached the conclusion that school grades should be distributed approximately according to the probability curve. Impressed with the truth of this conclusion, Max Meyer made a further study of the distribution of grades, in which he found it most satisfactory to divide the surface of distribution of the probability curve into five parts corresponding to five grades. If we designate these by the letters A, B, C, D, and E, in which A represents the highest grade, we should have, according to his results, 3% of A's, 22% of B's, 50% of C's, 22% of D's, and 3% of E's. He then finds that one department in the University of Missouri had, during the five years preceding his study given about 55% of A's, while another had given only about 1% of A's. He expresses the conviction also that conditions are as bad in other schools, and this has since been verified by the studies of Foster and others.

Dr. Meyer then suggests that we see that each instructor of 100 pupils or more make his marks conform roughly to this form of distribution, and accordingly the University of Missouri and the University of Iowa and probably a few other institutions have adopted this plan and have revolutionized the grading in those institutions.

But this wave of reform has left the large majority of our Universities and Colleges, as well as our Normal Schools, high schools and graded schools, untouched. The large majority of teachers from kindergarten to university still give marks according to their own personal tendencies rather than according to any scientific principles of how grades should be distributed or any thought of how they will be interpreted by others. They seem to feel that a pupil's mark is entirely a personal matter between him and his teacher, and that, so long as the better students get the better marks, all is well.

But a moment's consideration of the uses to which grades are actually put and of the fact that the number of uses made of them is on the increase, will show that, if we are to give marks other than merely "passed" or "not passed," they should be given upon some equitable and scientific basis, so that they may be rightly interpreted by those who need to interpret them.

If schools would confine themselves to the judgment "Passed" or "Failed," their sins of commission would be greatly reduced, but there are many who feel that their sins of omission would be multiplied in much greater ratio. Such a plan might easily be better than blundering attempts at fine distinctions, but could hardly be equal to the best judgments which really do discriminate with something approaching scientific accuracy, especially if these more distinctive grades may be of great service to employers, as President Crabtree's studies indicate, or to vocational advisers as others have suggested. In any case, very few schools attempt to follow the plan of giving only "Passed" or "Not Passed" and I know of none which follow it consistently; so that the plan seems to be in no immediate danger of general adoption by our schools.

Distribution according to the probability curve would likely do much to make our grades more intelligible; but with small classes this is often difficult or undesirable or both, and it is not very consoling to a teacher to feel that she must wait several years and accumulate a large number of marks before she is able to test their distribution and see just what marks she ought to assign to the few students whom she is called upon to mark here and now.

Can we offer our teachers any other guide to the giving of marks, which shall be rightly interpreted by the greatest possible number, which will enable them to give such marks at once and to a few?

Teachers and examiners of all kinds are often confronted with just such emergencies. To hope to tell them just how to meet every such case would seem a Utopian dream, but it may be possible to offer some suggestions which may be of service in guiding to the giving of right marks, after they have secured the necessary data. Such is the aim of the following experiment.

In three small classes of the more advanced students of education at Miami University during the past summer, we assumed that the mark a teacher gives on any work is an index of how she would interpret grades given under similar

conditions; and we further assumed that the average of a number of marks on the same answers by different teachers is more reliable than the mark given by any one of the teachers, and more nearly what would be rightly interpreted by the greatest number.

Accordingly, I prepared a list of ten or twenty questions (all different and covering the lectures and text we had completed), for each pupil of the class. While I asked these questions orally and each student in his turn answered his list orally, all the other members of the class graded his answers, and each assigned him a mark on the scale of 100 (the system they were required to use). The grades thus assigned to each by each together with the average given to each and by each are given in the three following tables.

In these tables the columns marked 1, 2, 3, etc., contain the grades given by the separate members of the classes to the other members, while the rows marked 1, 2, 3, etc., contain the marks given to the separate members of the class by the others.

The first column to the right of the double line contains the average grade assigned to each member of the class; the second, the average deviation of all the marks assigned to each; the third, the widest deviation of any two judgments on any one person; the fourth contains the average CORRECTED according to the principles explained below.

The first row below the double line contains the average grade given by each member of the class; the second contains the average deviation of the grades given by each from the average given to each; the third contains the weights assigned to the judgments of the separate examiners, varying invedsely as the average deviation of their respective judgments from the average of the judgments of the class. For instance, in Table I, the average of all the A. D.'s in the 2nd row below the double line is 5.2. If we assume that the judgment of any one whose A. D. is 5.2 shall have a weight of 1 and those whose A D.'s are greater than this average shall have a weight of less than 1, we obtain a series of ratios as follows: 5.2:4, 5.2:2.1, 5.2:3.6, etc., which, when reduced to decimal form give the weights found in row 3 below the double line.

TABLE I

Grades given:	by 1	by 2	by 3	by 4	by 5	by 6	by 7	by 8	Av's to	A.D's on	Ex D's on	Wt'd Av's
to 1		98	99	100	94	80	98	98	95.3	4.9	20	96.2
to 2	88		92	82	90	93	92	85	89.1	3.3	11	89
to 3	87	89		abs	95	84	89	87	88.5	2.5	11	88.5
to 4	88	86	90		80	91	93	89	88.1	3	13	88
to 5	88	82	85	89		88	92	69	84.7	5.1	23	85
to 6	75	76	67	abs	89		81	57	74	8.1	32	74.3
to 7	68	73	76	61	81	86		61	72.3	7.7	25	72.3
to 8	37	50	49	54	63	53	69		53.6	7.3	32	51.7
Av's by	76	81	80	77	84	82	88	78	80.7	5.3	21	80.6
A.D's by	4	2.1	3.6	5.4	7	6.4	5.7	7.7	5.2			
Wt's of	1.3	2.5	1.44	.96	.74	.81	.91	.67	sum 9.33			
Dr. Story's Wt's	.0635	.5394	.1724	.0648	.0393	.0408	.0515	.0281				

TABLE II

Grades given:	by 1	by 2	by 3	by 4	by 5	by 6	Av's to	A.D's on	Ex D's	Wt'd Av's
to 1		88	97	92	96	85	91.6	4	12	91
to 2	89		73	81	92	88	85.4	6	19	84.1
to 3	85	78		76	94	80	82.6	5.6	18	80.7
to 4	81	75	71		95	85	81.4	6.8	24	80.1
to 5	73	62	55	61		80	66.2	8.2	25	65.8
to 6	45	54	53	56	70		55.6	6	25	54.2
Av's by	75	71	70	73	90	84	77.1	6.1	20.5	76
A. D's by	4.8	4.2	7.4	3.2	10	6.2	6			
Wt's of	1.25	1.43	.81	1.88	.6	.97	6.94			
Range of Grades by	44	34	44	36	26	8				
M. V's of Gr's by	9.4	10	12.4	12.2	5.8	2.6				
Medians	81	75	71	76	94	85				

TABLE III

	Grades given:											
	by 1	by 2	by 3	by 4	by 5	by 6	by 7	by 8	Av's to	A.D's on	Ex D's on	Wt'd Av's
to 1		90	95	91	98	92	96	96	94	2.6	8	94.1
to 2	92		91	89	95	86	92	90	90.7	2	9	90.5
to 3	94	75		87	73	84	95	87	85	6.6	22	85.8
to 4	85	68	75		96	88	88	92	84.6	7.7	28	83.5
to 5	86	80	78	86		74	96	74	82	6.3	22	81.7
to 6	85	69	80	72	91		90	74	80.3	7.3	22	79.8
to 7	90	68	77	72	91	70		88	79.4	8.9	23	79.3
to 8	84	65	72	59	70	80	88		74	8.6	29	74
Av's by	88	74	81	79	88	82	92	86	83.8	6.3	20.4	83.6
A. D's by	5.7	9.1	2.7	6	8.3	5.1	7.9	5	av 6.2			
Wt's of	1.1	.68	2.3	1.03	.75	1.2	.78	1.24	sum 9.08			
Range of Grades by	10	25	23	32	28	22	8	22				
M. V. of Gr. by	2.6	6.4	6	9.1	7.8	6	3	6.3				
Median by	86	69	78	86	91	84	92	88				

By multiplying each grade given by the weight of the judgment of the examiner giving it and dividing by the sum of the weights thus used, we obtain the weighted averages of column 4 to the right of the double line.

Professor W. E. Story of this University, who has taken great interest in this problem, has worked out the weights for Table I by the more laborious but more exact method of weighting the judgments of the separate examiners inversely as the mean square of their deviations from the average given to each instead of inversely as their average deviations, as I have done. The weights he obtains are found in the fourth row below the line in Table I.

By comparing the weighted averages with the plain averages we notice that the differences are but slight; that all the averages place the applicants in exactly the same relative position. Hence, the average judgment of several competent judges gives approximately the true grade, and the one which will be more nearly rightly interpreted by the greatest number of such judges. All the work of computing the

weighted averages might, therefore, be omitted without great error. But a glance at the first row of figures below the double line in each table shows that the separate examiners vary widely in the average grade given by each. Most of these examiners show a strong personal equation both in the central tendency and in the distribution of the grades assigned. For instance, in Table I Examiner No. 1 gives an average grade of 76, while No. 7 gives an average grade of 88. In Table II Examiner No. 3 gives an average grade of 70, while No. 5 gives an average grade of 90. In Table III No. 2 gives an average grade of 74, and No. 7 an average of 92.

Again if we compare No. 4 and No. 7 in Table III as to distribution of grades we find that the grades given by No. 4 range from 91 to 59 (a difference of 32), while those given by No. 7 range from 96 to 88 (a difference of only 8). Expressing their tendencies to distribute grades in terms of the mean variation of the grades they gave, we have 9.1, and 3, respectively, as is shown in the second row below the heavy line.

The three rows below the heavy line in Tables II and III, are intended to show the peculiarities in the distribution of the grades given by the separate examiners. The first of these merely shows the range of grades given by each, the second the mean variation of the grades given by each, and the third the median grade actually given by each.

It seems evident that very few of these teachers could interpret rightly the grades given by any other one of them.

Suppose two applicants of moderate and equal ability for the same prize, one graded by No. 2, the other by No. 7 of Table III (one gives a grade of 74, the other of 92) it is evident that one would have an unfair advantage of the other. And it often occurs, under the elective system, that two such teachers are found in the same high school, normal school or college, and pupils who elect work with the one giving high grades have very unfair opportunities to win honors, or prizes. It often occurs that state, county and city examiners for teachers' certificates, vary as widely in their personal tendencies of marking as do any of the teachers whose grades are shown in these tables. It is highly probable, too, that the judgments of civil service examiners are just as prone to error. The simple truth is that the language of grading is as full of provincialisms and fuller of solecisms than was any Indian language at the time of the discovery of America; that the large majority of teachers and examiners

can neither give grades which will be rightly interpreted by others nor interpret rightly grades given by others.

It seems to me essential that each teacher and examiner be led to know this by actual tests, similar to the ones here described, and not merely by theoretical discussions as to how grades should be distributed. Groups of teachers should have the opportunity of trying to express the same thing by their marks and seeing how differently they actually express it (that one gives an average mark of 74%, another of 92%, with nearly all the questions and answers identical).

Once thoroughly impressed by actual experience with the fact of her own "provincialisms" and "solecisms" in grading, each teacher is prepared to look for some guide to the use of expressions which will be understood, if not by all, at least by the greatest number who try to use the same language. As a tentative guide, the plain averages given by the group may be used without serious error, especially if the group be large and gathered from different localities; for then we might expect both "provincialisms" and "solecisms" to be reduced to a minimum in the average, even though used frequently by individuals.

Hence, each teacher may discover her peculiarities of grading by comparing the grades she gives with the averages given to each, and her tendency to grade high or low by comparing the average grade she gives with the average by all.

In normal schools, teachers' colleges, teachers' institutes and teachers' meetings (wherever teachers meet for professional training), it seems to me it would be practical and very helpful to present questions on the professional work taken in common, questions requiring thought as well as memory, asking each teacher a series of 10 or more questions orally before the whole group, and while she answers orally letting all the others mark her answers according to whatever system of marking they are to use. The average grade given by each teacher could then be compared with the average by all, and each teacher would learn at once of any constant tendency to mark high or low (and this is the source of the most constant and misleading errors). With her attention once called to the direction and amount of her constant error, each teacher would strive to correct that constant error in all her future judgments. This process could be repeated until the teachers coincide more nearly in their judgments. By this time each teacher will have passed a large number of judgments so that a curve of distribution of the grades by each teacher could be compared, with profit, with the curve of distribution of all the grades given, and with the probability

curve. Besides this, each teacher should be encouraged to compare the separate grades given by her with the averages given to each applicant by the group, both as to the actual grades given to each member and the order in which the applicants are placed by her grades and by the averages. This will indicate whether, besides her constant error of grading high or low, she needs to guard against variable errors which show a tendency to the occasional placing of a higher mark on a poorer performance than on a better one. If it seemed best one might also find the average deviation of the judgment of each examiner from the average grade given to each applicant and weight the judgments of the examiners according to either of the principles explained above. The central tendency and variability of grades might also be shown as in the last three rows of Tables II and III. As has already been suggested, the more laborious process of securing the weighted averages might, as a rule, be omitted. If time were limited, the getting of the grades and the averages found in the first column to the right of and the first row below the double line of these tables should present the lessons of greatest importance and interest to earnest teachers, and if attention were focussed on these most important lessons a fair degree of uniformity in grading by the members of such a group should be secured.

Should certain teachers be unable or unwilling to make their marks coincide with the requirements of such a plan, and if the direction and amount of their error were fairly constant, an approximate correction of their marks could be made before they were placed on the school record, and this direction and amount would have been determined during the course of the experiment here suggested. If at the end of such an experiment the errors of the judgments of certain teachers remain both great and variable, it will be readily seen that their judgment in such matters cannot be trusted nor used as the basis for computing right judgments.

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DR. MARIA MONTESSORI AND HER HOUSES OF CHILDHOOD

By Theodate L. Smith

Within the last few years an experiment in elementary education has been going on in Rome which is productive of such remarkable results that it is attracting widespread interest in all educational circles. In Dr. Maria Montessori's *Case dei Bambini,* children from four to five years old read, write and do number work with a facility equal to that of children of the second and third grades, and this result has come about with no over-exertion on the part of the child and without the slightest forcing but as a process of normal development. Dr. Montessori's method is due to no fortuitous circumstances but is the result of years of scientific research and is founded on anthropological and psychological principles. The first woman to receive the degree of M. D. from the University of Rome, while acting as assistant in the Psychiatrical Clinic of the University of Rome she became interested in the education of feeble-minded children and devoted herself to the study of this problem. She made herself thoroughly familiar with the work of Seguin and with Itard's experiment with the savage of Aveyron, and investigated the Seguin method as used in the Bicêtre. As a result of her lectures on the education of the feeble-minded, given at Turin and Rome in 1898, she was appointed director of a new school, the *Scuola Magistrali Ortofrenica,* which for two years she conducted with great success. At the end of that time she re-entered the philosophical department of the University of Rome and devoted herself to the study of experimental psychology and anthropological pedagogy, continuing the work for seven years and making investigations in the schools and in the psychological laboratories of Italy. In 1906 an opportunity for trying upon normal children the methods worked out upon the feeble-minded was offered to her through Edoardo Talamo, the head of a real estate society which was part of a scheme for social betterment in Rome. In the group of tenement-houses managed by this association, between January, 1907, and 1908, four schools for children of these tenements were established. For these home schools the following rules were announced:

"Attention must be paid to the health and the physical and moral development of the children by means of lessons and exercises adapted to their age.

"There will be in charge of each *Casa dei Bambini* a directress, a physician, and a caretaker. All children in the block between the ages of three and seven years have the right of admission to the *Casa dei Bambini.*

"The parents of children attending the *Casa dei Bambini* pay no contribution whatever, but they assume these imperative obligations: A. To send at a specified hour their children to the schoolroom, clean in person and clothing, and with a suitable pinafore. B. To show the greatest respect and deference towards the directress and all other persons connected with the *Casa dei Bambini,* and to coöperate with the directress in the work of educating their children. At least once a week mothers will be able to speak with the directress, reporting observations on their own children in their home life, and receiving from the directress notes and suggestions for the welfare of the children.

"There will be expelled from the *Casa dei Bambini,* (a) those who present themselves in an unwashed and slovenly condition (b) those who show themselves not amenable to discipline, and (c) those whose parents fail in respect to those placed in charge of the *Casa dei Bambini,* or in any way threaten to destroy by bad conduct the educational work which is the aim of the institution."

As a further incitement to the keeping of these rules, the report from the *Casa dei Bambini* was to be taken into consideration in the yearly award of prizes offered by the society for the best-kept tenement. The greatest difficulty in carrying out the experiment was naturally in obtaining teachers or directresses, as they are called, who were both adapted by nature and sufficiently trained in the principles of Dr. Montessori's method to conduct the work successfully. This will probably always be one of the chief difficulties in the successful application of the method, but the work has passed beyond its beginnings, as part of a sociological experiment, to private schools for children of the more fortunate classes, and is beginning to be introduced into public school systems not only in Italy but in other European countries. In Switzerland there are now seventy schools conducted by Dr. Montessori's method.

The fundamental principles which distinguished Dr. Montessori's method are the complete liberty of the child in its spontaneous manifestations and the utilization of every atom of its natural energy. Dr. Montessori calls a child dis-

ciplined who is master of himself and therefore able to dispose of or control himself whenever he needs to follow a rule of life. The liberty of the child must have as its limit only the collective interest. He must then be hindered from any acts offensive or harmful to others. All else that he does must not only be permitted but observed by the teacher, and the teacher must have not only the capacity but the interest to observe this natural development. She must avoid rigorously the repression of spontaneous acts and the imposition of work at the will of another. To interfere with this spontaneity is, in Dr. Montessori's view, perhaps to repress the very essential of life itself. The aim of discipline is to train to activity, to work, for the welfare of self and of others. To this end the development of independence in the child is necessary. So long as he is served by others and dependent upon them, dressed and undressed, fed, and so forth, he is not free. But if properly trained he ought to be able to do these things for himself by the time he is three years old. It is, of course, far easier to feed and to dress a child than it is to teach him to do it for himself, but the first is the work of a servant and the latter of an educator.

In Dr. Montessori's system rewards and punishments are banished. Reward comes in the child's own sense of mastery. Failure is a mere negation, to be taken as a sign that the child is not yet ready for that particular exercise. The teaching is almost entirely individual and the three fundamental rules for lessons are that they shall be brief, simple and objective. No superfluous words must be used in giving the lesson since they tend to confuse the child and to distract his attention from the main point, and the teacher must not insist on the repetition of a lesson against the child's inclination, and she must not let the child know that he has failed or has not understood.

If one visits one of Dr. Montessori's schools, the children all seem to be occupied in interesting play. Some are lying on the floor playing with blocks or strips of wood painted in different colors. Some are playing blind-fold games, finding out by the aid of their fingers alone the shapes and sizes of objects and different textures of silk, satin, wool or linen. One child who was absorbed in writing on the blackboard did not even notice my entrance into the room. She was writing in large vertical script and forming the letters beautifully, and in answer to my question as to how long she had been writing, I learned that she had begun the day before. Occasionally some child called the teacher when he had finished his game and received either approval or a suggestion

that perhaps he would like to do something else. But the interest and the attention of the children is never interfered with. If a child wishes to spend the entire school period of two hours in doing one thing he is allowed to do so on the principle that the spontaneous attention is a fundamental educative principle which must not be interfered with. In spite of the fact that this particular school in the convent on the Via Guisti draws its children from an exceedingly poor section in Rome, their appearance was neat, and although no discipline was apparent, the schoolroom was in the truest sense controlled and orderly.

The first item in the order of the day's exercises when the children arrive at nine o'clock (for in this particular school the children are cared for from nine until half past five, although only two hours or at most two hours and a half are devoted to school work), is a visit to the toilet rooms, where they are taught to wash their hands and their faces, necks and ears, and to put on their pinafores, which they do for themselves or by helping each other. Then comes a tour of inspection of the schoolroom to see that everything is in perfect order, to detect if there is any dust left in corners or if anything is out of place, that any deficiencies in this line may be remedied by the children themselves. There is also play in the garden until ten o'clock. As the pedagogical method has been developed from those used with feeble-minded children, many of the things which the younger children are doing are familiar to those who have seen the instruction in the schools for defectives. Various items in the way of motor-training, buttoning and unbuttoning, tying and untying, hooking and unhooking, lacing, and so forth, are all a part of the lessons of the little ones. But they are lessons which the child works out for himself. He is allowed the pleasure and the triumph of finding out how to do things himself. To a certain extent imitation comes in, since he sees the other children doing these things. There is also a regular system of sense training. In this sense training some of the materials used are the regulation kindergarten gifts. In other cases, they are materials devised by Dr. Montessori or everyday objects which are adapted to the purpose, for Dr. Montessori's fundamental principle when she began her work was to study all systems but to be bound by none. She kept as her fundamental principle Wundt's saying that all methods of experimental psychology are reducible to one, that of controlled observation, and her system has been worked out by this method of individual observation of the child and consists in giving it the environment adapted to individual normal

growth. The touch and muscle-sense, which seem to have fallen into disuse in the teaching of normal children, Dr. Montessori has re-introduced from her experience in the training of defective children, and in the plays and lessons constant use is made of the principle of establishing the associations between visual, muscular, and tactile, and auditory sensations. For example, in the sight training, the children have a set of cubes graded from large to small. They are given these to pile up in the graduated order. They are taught to run their fingers along the outlines and thus connect the tactile, muscular and visual sensations. Then they have blindfold games, in which the blocks are piled wholly by the sense of touch, the children finding a great delight in discovering when the bandage is taken from their eyes that they have "seen with their fingers."

In her first school, Dr. Montessori found that her children from three and a half to four and a half years old were already fairly expert in the preliminary training. They could dress and undress themselves, that is, they had learned to apply practically their various exercises in buttoning, unbuttoning, lacing, tying, etc.; they had learned to be neat in person, they had had considerable sense training, and they were eager for something more, in fact they clamored to be taught to read and write, and the experiment was tried with surprising results. The writing came first. Dr. Montessori had learned by her experience with feeble-minded children that in the process of learning to write the mechanism of muscular control and holding the pen should precede the mental effort of learning to write. The child should not be set to the task of learning to manage a pen and produce certain forms at the same time. The didactic materials for training the muscular mechanism and for holding and managing instruments of writing are, for the first step, either solid or outline forms of triangles, squares and other geometrical figures, made of metal, cardboard or wood. The child traces the outline of these and is then given a colored pencil of large size, to fill them in. No directions as to manner of holding the pencil or of making the marks are given to the child. His movements are left free and unconstrained. At first, naturally, the filling is irregular, often exceeding the outline or failing to touch it at every point, but the children enjoy playing with these colored forms and gradually the strokes become even and the space is accurately filled in. When this happens, the child is ready for the next step but a week is usually allowed to elapse before it is taken. Script letters of large size cut from fine emery paper are pasted upon

squares of cardboard, and the alphabets thus formed are placed in a case, there being four copies of each letter, and the letter is also painted at the bottom of the compartment to assist in the resorting. The child is given a letter, a vowel first, and told to touch it. Being already expert in this sort of exercise, he usually does it correctly, but if need be the teacher takes his hand and directs the first and middle finger properly about the form of the letter and at the same time the teacher says, "This is *a,*" giving, however, the phonic sound, not the name of the letter, thus associating the visual and the tactile and muscular sense with the phonic sound. The child is usually interested in this and repeats it by himself, in some cases many times. The next step is to teach the child to recognize the letter when he hears the sound corresponding to it, so the teacher says to him, "Give me *a*" or whatever the letter is. And the third step, after the letter has been lying on the table for some minutes, is to test the memory and recognition, and the teacher asks the child, "What is this?" the child, of course, being expected to give the phonic sound of the letter. The vowels are usually taught first and the consonants second but there is no established order, as often the interest of the child in certain words or letters will determine the progress. In giving the consonants the teacher gives the sound of the letter several times, for instance, *m, m, m;* she then combines it with vowels which the child knows, saying *ma, me, mo,* but always finishing with the sound of the consonant, *m, m, m,* and having the child repeat this after her. Besides the individual letters, words are given in the same way. For instance, the word mano. The teacher says to the child, "Give me *m,*" and so on with the other letters, giving the phonic sound to each letter, and finally pronouncing the word *mano,* the child always tracing the word with the fingers. This they often do blind-folded and a very common request in the school-room to the teacher is "Please blind-fold me," or "Please put the bandage on." Some day when the child has become familiar with the vowels and a part of the consonants, for it is not considered always necessary that the entire alphabet should be learned before he begins to write, he is given a piece of chalk, and having potentially learned to write without ever having had an instrument of writing in his hands, he suddenly finds himself in possession of a new power and thinks he has grown old enough to write. For a few days this acquisition becomes an absorbing occupation. When I marvelled at the remarkable accuracy and evenness in the formation of the letters I asked the teacher if the children were given no directions as to even-

ness of stroke. Her answer was, "They teach themselves." No child is ever told that a letter is faulty but the practice in tracing the sandpaper letters with the fingers is kept up long after the children are able to write and in fact they write more by muscular sense than by sight, and if a child is in doubt as to the next letter that she wants to write, instead of looking at the letter, she runs her fingers over the cardboard model, so that the muscular training is continued.

In learning to write, the child has taken all but one step in learning to read. He knows the letters by sight and the sounds which correspond to them. He has learned in composing words to associate those combinations of symbols and sounds with the word and the object or action for which it stands. But he has no practice in translating visual symbols into their meanings. In Dr. Montessori's reading lessons there is no particular effort made to begin with easy words. That is not necessary, for the child already knows how to read the words as composed by their sounds as he himself has put them together. The remaining step in learning to read that is to silently interpret the visual symbols, is made a game. A number of cards containing the names of objects or actions, in script, are placed in a box. The objects used are usually playthings. The children are allowed to choose one. The child must read the word mentally, that is, without pronouncing it aloud, and keep it a secret from the others. Then when he gives it correctly he gets the object to play with. And as in all the plays and games use is made of the spirit of cooperation. Children are included in the game who do not yet know how to read, and some child who has already learned, chooses for the little one, who is not yet so far advanced, and gets the desired plaything for him. This particular game is exceedingly popular and can be greatly varied. Names of the children, of objects, of actions, which the children are permitted to execute, are all used. And the children continue to carry on this game in their recreation hours as well as in the school period, spontaneously. In passing from words to phrases and sentences the children are given cards on which directions or request for some action is written, no particular effort being made to express these in any terms simpler than would be used in ordinary conversation. For example, "Close the window-shutters, open the door and then wait a moment and put them as they were," and the child carries out the directions.

Teaching of number and beginnings of arithmetic are also taught in Dr. Montessori's schools. The children three years old usually can count as far as three when they first come

to the school. In teaching them to count, the objects about them are used. For instance, it is said to the child, "There are two buttons lacking on your pinafore," or "Three more plates are needed on the table," or playthings are used as objects of numeration; in general, things at hand rather than any special apparatus. The first definite lessons are in changing money. Actual money is used, care being taken for hygienic reasons to procure new pieces. The children first learn the names and values of the coins and then match the larger pieces with the number of smaller pieces required for the equivalent. As further material for teaching, a set of rectangular bars already used in sense training is utilized, the longest of these being a meter and the shortest a decimeter in length and all divided into lengths of a decimeter, painted alternately red and blue. These are used as aids in counting, and in their different arrangements, for the simple processes of addition and substraction. Little sets of colored spindles, and colored counters and rods, have also proved attractive material. There are also used two boards placed at right angles, one placed horizontally on the desk and the other remaining vertical, the horizontal one being divided by strips into five compartments, in which objects may be placed, and large figures are placed in the vertical series, so that a number of objects can be placed in the corresponding compartments of the horizontal board. Various games and exercises are played with this. Froebel's cubes and the discs used in playing quoits or any other convenient material is used. The teaching of zero naturally presents more difficulties than the teaching of the digits. A sample lesson on the zero is the following: A group of children stand around the teacher, who says, "Take zero steps." There is an immediate impulse to movement and the teacher says, "But zero is nothing." A second trial and the children stand still and laugh. Then the teacher tries again, "Come and give me zero kisses." Again the children laugh but stand still in their places. And so the game goes on, varied with the digits, a lesson in inhibition and self-control as well as arithmetic being skillfully introduced into the teaching. Another play which involves a lesson in self-control as well as arithmetic is a game in which the children choose from a box on the teacher's desk a folded paper containing a number, which they are to take to their places without showing anyone, keeping it quite secret, and having read it and after its verification by the teacher, they may take the number of objects or playthings from the desk corresponding to the number on the paper. There is generally, at first, a tendency to take a larger number than that

called for. But here again the approval of the teacher as to the correct choice becomes a restraining influence. They are at liberty to take more than the number but the exact number is the thing which wins the teacher's approval. Here, again, the child with the zero has a lesson in self-control for she is apt to show disappointment in her expression but it is a part of the game to keep it quite secret, so she, too, comes to learn the value of absolute correctness and in the end to consider it just as much fun to get the zero and not let anybody know it, as to draw the nine. There are many other lessons or plays in this school which are not to be found in ordinary schools. The game of silence, for instance, is one which the children not only enjoy, but as they grow more perfect in the game they learn many things about what makes a sound, as for example, their own breathing, other movements. They learn to notice the ticking of the clock and the many little noises which, as a rule, do not come into consciousness and as a means of control the game of silence is often very effective.

It will be noted that refractory children who are not amenable to discipline are dismissed from the *Casa dei Bambini,* but a question as to the actual number of refractory pupils was met with a smile. They occur but rarely and in Dr. Montessori's view, a naughty child is a sick child and to be treated accordingly. In actual practice, a child who does not naturally fall into the ways of the school is simply given a little chair and table with playthings apart from the others and especial tenderness shown him because he is sick and cannot take part in the common life. Suggestion and the natural impulse to imitation are the mental therapeutics employed, but a physician forms a part of the regular staff of every school and the children receive any needful medical treatment.

Taken in its entirety, Dr. Montessori's system involves physical as well as mental development and in her schools simple apparatus adapted to the needs of the children and exercises both for development and grace of movement are given. She lays stress, too, on diet and in the philanthropic schools where the children are given at least their noon meal, this can be to some extent carried out, for it is the development of the whole child that Dr. Montessori seeks. As yet Dr. Montessori has not carried out her method experimentally beyond the kindergarten age, that is, three to seven years, but she looks forward to doing so. But even in its present stage of development her system of training would do away with certainly the first two grades of the ordinary school system.

Within recent years we have had in Germany and the United States published reports of children who according to our usual estimate are mental prodigies, who like Dr. Sidis' son or the children of Dr. Berle and Professor Wiener of Harvard are prepared for and do enter college at ages varying from 11 to 14 years. It is claimed by the parents of these children that their remarkable proficiency is due not to special natural endowments but to methods of training. And it is interesting to note that these methods of training, though never formulated into a system and differing somewhat among themselves, and having the emphasis laid on different factors, have nevertheless certain principles in common, and these agree with those laid down by Dr. Montessori: the conservation of the natural energy, of natural interests, early training in self-reliance, in habits of attention and quick, correct thinking, and this without forcing. Dr. Sidis emphasizes suggestion more than the others, but he, too, declares that the chief aim in education is to train the child to make "any habitual and profitable use of his hidden energies."

In these days of keen competition in professional and business life when more and more specialized training is required, the question of the conservation and utilization of natural energy becomes of great import. We have had critics in plenty of our school systems and their lamentable deficiencies, and endless discussions as to where time might be saved, but of constructive work of demonstrated efficiency, Dr. Montessori's schools furnish a challenging example.

A detailed exposition of her method has been given by Dr. Montessori in her *Il Metode della Pedagogia Scientifica Applicato all' Educazione Infantile nelle Case dei Bambini,* published in 1909, (*Città di Castello, Tipografica della casa editrice* S. Lapi), and for those who wish to make a scientific study, her "Antropologia Pedagogica," published in 1910, will also be of interest. A German translation of the former work is already in progress. The only notices of her work which have as yet appeared in English are articles in the May and December McClure's of the present year, which attracted widespread attention, and a few brief notes in educational or medical journals.[1]

[1] An English translation of the Metodo della Pedagogia Scientifica, which will be ready early in 1912, is now in preparation by the F. A. Stokes Pub. Co. of New York. Arrangements have also been made to furnish materials for the Montessori method at the House of Childhood, 603 Flatiron Building, New York City.

THE SUPERVISION OF COLLEGE TEACHING

By Samuel P. Capen

The assertion is often made that nowhere else in our educational system is such poor teaching to be found as in college classes. In view of this criticism the following incident which has lately come to the writer's knowledge is somewhat significant. A few years ago the superintendent of schools in a middle western city visited all the courses in liberal arts at one of the large eastern universities. He spent several weeks in the task and graded the work of all instructors according to the standards which he commonly applies in judging his own corps of teachers. His marking showed that, judged by these standards, about sixty per cent of the professors and instructors were too poor to keep. About twenty-five per cent were passably good, but should be urged to give more attention to the methods of presenting their respective subjects. About fifteen per cent were excellent.

Of course, these figures do not actually prove the inferiority of college teachers to those employed in public school systems. They are the result of observation in a single institution and by a single examiner. But they are perhaps indicative of a condition which is wide-spread.

The efficiency of colleges and universities is now a common subject of investigation. Both inside and outside agencies have studied the various departments of university administration and have suggested many improvements. But as far as the writer is aware the question of supervising the work of college teachers has not yet been publicly discussed. The teaching force is doubtless the most important part of the educational machine. If the efficiency test is to be thoroughgoing it should be applied here also. Believing that the preliminary condition for a discussion of this subject must be at least a partial knowledge of the facts, the writer has undertaken to find out what is the practice of some sixty representative institutions in regard to this matter of supervising the work of teachers.[1]

A communication containing the questions given below was sent to the Deans or Presidents of the institutions chosen, all

[1] The names of the institutions are listed at the end of the article.

of whom replied. Many of them also offered valuable suggestions in addition to the information solicited.

1. Does the President or the Dean inspect the classroom work of the professors and instructors in your institution at regular or irregular intervals? Does the head of each department inspect the work of subordinate members of the department?

2. Do the trustees or the alumni of your institution send a visiting committee to oversee the work of the teachers? If any other system of supervision is employed will you kindly state what it is?

3. Do the supervising or inspecting officers suggest to the inexperienced members of the staff how their teaching might be improved?

4. Does information in regard to the teacher's work in the class-room, gained through inspection, form the basis for promotion or discharge? If not, what is the basis for promotion?

5. Do you think the establishment of a system of supervision, if one does not already prevail in your institution, would be resented by the teachers? Do you personally think that some method of official inspection is desirable?

The information obtained may be briefly summarized as follows:

	No. of Institutions.
Supervision exercised by President	12
Supervision exercised by Dean	1
Supervision exercised by Heads of Departments	24
Supervision exercised by Committee of Trustees or Alumni	14
Supervision exercised by no one	19
Suggestions made to inexperienced teachers by Heads of Departments	30
Suggestions made to inexperienced teachers by President, Dean or Committee	9
Suggestions made to inexperienced teachers by no one	21
Promotion on general impression of work and personality of teacher	24
Promotion on results of inspection combined with general impression	15
Promotion on recommendation of Heads of Departments	8
Promotion on length of service	1
No information given	9

	No. of Institutions.
Reporting officers believe supervision would be resented.	22
Reporting officers believe supervision is desirable.....	34
Reporting officers believe supervision is undesirable.....	14

The most striking feature of the returns[1] was the large number of college officers who believe that some form of administrative supervision is desirable. It is the writer's belief, but one which he did not expect to find shared by so many others. There are serious objections to almost every form of supervision suggested in the questions sent out. These objections will be apparent to any reader, but for the sake of completeness they might be summarized here.

In the first place tradition sanctions the "laissez faire" policy with regard to college teachers. It is their inheritance from the time when Lehrfreiheit was fought for and won, and from the time when pedagogy was either unknown or looked at askance. To break down the tradition would probably cause deep resentment in many quarters.

Moreover, the feeling of independence which most college teachers enjoy is one of the strongest motives toward fruitful and unhampered work. The college teacher is in much the same position as the creative artist, who is a law unto himself; and if the teacher is truly an artist in his field no more favorable condition for his work could be conceived. There is also a distinct inspiration to students in the unconstrained devotion of the best type of teacher to his profession, in his conscientious performance of duty unenlivened by the presence of a boss. Teaching is largely a matter of personal influence. If an educational institution or system adopts too many mechanical methods it may submerge personality

[1] The returns developed certain facts in addition which are not shown in the foregoing summary. In several institutions both the president and the heads of departments inspect the work of instructors. Several others have both a system of committee visitation and one of departmental visitation. In nearly half of the twenty-four institutions in which visiting is reported done by heads of departments the administrative officers are not sure whether the visits are actually made or not. It seems fair to assume, therefore, that these institutions have no real system of supervision. Most institutions which are visited by committees of trustees, alumni or state officials report that little profit is derived from the visitation. The duty is often done in a perfunctory manner. The officials are seldom qualified to judge the work of the instructors and they generally do not stay long enough on the premises to make a careful observation. In only two of the institutions where this type of visitation is in force are the administrative officers satisfied with it.

and thereby interfere with the somewhat mysterious influence of teacher upon pupil.

It is doubtful whether any officer now commonly employed by a college would be able to supervise the work of instruction in all departments. College presidents are often not teachers; and even those who have taught are generally elected to the administrative office on the ground of other capacities than skill in the classroom. Deans also are not always the best teachers, or the most skillful judges of teaching. And surely committees of outsiders, whether trustees or alumni, do not possess the expert qualifications for such an office.

Finally, it is felt in many quarters that the financial return made to college teachers is so small that they should not be held to too rigid a standard of excellence.

On the other hand there are several arguments in favor of more systematic oversight of the work of college teachers, which it is the purpose of this article briefly to present.

First, the interest of the institution and of the students should be guarded. There are many men and women occupying teachers' positions who should never have been allowed to teach. This does not necessarily mean that they are of inferior mental power, merely that teaching is not the occupation suited to their talents. All of us know some of these pathetic failures. They are a source of dissatisfaction both to themselves and to the institution which employs them. Had they been turned aside in time they might have found a career of real usefulness and success. But the most important consideration is that generations of boys and girls would have been saved from the harmful ministration of bunglers. A more carefully guarded system of appointments and promotions would protect both institutions and students from such as these.

Nearly all institutions are peculiarly subject to malpractice at the hands of the fledgling instructor. The present requirements for holding most college positions do not include previous teaching experience, or even training in the art of instruction. To be sure, teaching like any other art can only be learned by practice, but there are certain underlying principles which enable the beginner to avoid many mistakes and help him shortly to find the best way to present his subject. Most young college instructors are totally unacquainted with these. However well they may know their subjects, a little friendly oversight at the outset would shorten the path to reasonable perfection in the art of presentation. Obviously, both the institution and the instructor would gain by the arrangement. It is discouraging to flounder just beyond one's

depth, when the touch of a helping hand might bring one's feet in contact with the bottom. The young instructor often flounders for years before finding his feet and in the process he has wasted much vital energy which should have gone to the advancement of his work. The institution owes its young teachers this help as much as it owes its students protection against incompetence.

There is nothing more unjust in present-day educational administration than the policy of most colleges in regard to promotions and dismissal. No two college teachers can be equal in skill or attainments, to be sure. Personal differences are perhaps more clearly evident in teaching than in most other forms of work. It would surpass human ingenuity to devise a method of classifying college teachers according to merit. However, promotions from the rank of instructor to that of assistant-professor, and from an assistant-professorship to a professorship should be made with full knowledge of all the available facts. In the relatively few cases where men fail of promotion, also, the advancement should be withheld only as the result of the fullest information. A teacher who is not promoted may justly feel aggrieved unless the administrative officers have investigated his work.

Now, it will be observed, that very few of the institutions reporting claim that promotions depend upon actual knowledge of a man's work in the classroom. From various sources the administrative officers get a general impression of a teacher's value and capacity. His attitude in faculty meetings and in committees; his judgment on matters of college policy; his personal magnetism, or the lack of it; the opinions expressed accidentally by students in regard to his work; the feeling of his colleagues toward him;—all these elements, and others also, enter into the rating of the man. On the basis of these impressions he is promoted or held back. In extreme cases he may be asked to resign.

That this is unfair, everyone who is familiar with the remarkable fickleness of college communities must know. A man who is a candidate for promotion or whose dismissal is desired is entitled to be judged by something more tangible and more definite than impressions. In any other business relation the promotion or discharge of an employee depends primarily upon his ability to perform the particular piece of work he is hired to do. The relation between a college and its teachers is distinctly a business relation, and should be so regarded by both parties to the contract. An instructor is hired to teach. If he can do it successfully he should be advanced. If he can not, he should be dropped, without

compunction and without delay. But such action is only justified when the employing authorities have direct evidence of his incompetence.

Thus far only the conscientious incompetents have been alluded to. There is another class of inefficient college teachers, fortunately a small one and still more fortunately a decreasing one. I refer to those who shirk. The tendency to stagnate is almost irresistible in certain kinds of college teaching. That no more fall a prey to it is perhaps the best testimony to the high ethical tone of the profession. But there are some who do. There are some who give the same lectures year in and year out, whose horizon never expands. There are some who go to their work unprepared and spend the hour marking time. These are the men who sadly need the stimulating presence of a supervising officer.

Lastly, there is the instructor whose interests lie chiefly in the direction of original research. The question is still disputed whether research or teaching is the principal function of the college instructor and it is not the purpose of this article to add to the discussion. One consideration, however, may be presented. The possession of a strong scientific interest undoubtedly conflicts, to some extent, with due attention to the art of teaching. The pioneer in science may be a great inspirational force to his students, but he often does not give them much more than inspiration. He could be helped by suggestion from one whose specialty was presentation. The institution would not lose any of his value as an investigator, but the students would gain much if his skill as a teacher were increased.

These are the principal reasons why it seems to the writer that a more definite and systematic method of supervising the work of college teachers should be employed. The public school systems of our states and cities have for years appreciated the importance of expert supervision of their teaching force. The superintendent of schools is not a boss, but a friendly critic and helper, the teacher of the teachers. It is his principal function to furnish continued inspiration to the competent members of his staff and to show the novices and the incompetent how to do better. Under the direction of these officers the work of instruction has grown more systematic, more thorough, and more inspired. Methods differ, to be sure, in different stages of the educational process. But the personal characteristics, the tastes, and the interests of the successful practitioners of the art of teaching remain substantially the same in all stages. Is there any reason why a system which works superlatively well when applied to the

teachers of youths from fourteen to eighteen should not also prove beneficial to the teachers of youths from eighteen to twenty-two?

In the writer's judgment, the strongest objection to a closer supervision of college teaching is that no college officer now employed is trained for the work. But this objection is, after all, not vital. The first superintendents of schools were untrained. Out of the need grew the profession. Out of the practical experience of the untrained pioneers emerged the principles of professional training. So it is wherever the progress of civilization calls a new occupation into being.

It is evident that in order to perform successfully the functions outlined in this article, the supervisor of college instruction would have to be a man of rare personal gifts. He must be tactful and sympathetic, and he must have an open mind. The dogmatist or the dictator would produce stagnation or rebellion. It would be well that he should have had conspicuous success as a teacher. But above all, his relations with his colleagues should be perfectly frank and without assumption of superiority. Otherwise he would defeat the purpose for which his office was created.

Some colleges might find that they had no one on their staff who possessed the combination of talents, personal and professional, which such an office would demand. But they might, of course, seek the desired article in the open market. It is the writer's belief, however, that on most college faculties there is at least one man—often more—entirely qualified to undertake this dificult task.

There follows the list of colleges and universities which replied to the circular letter:

Amherst College
Baker University
Bates College
Boston University
Bowdoin College
Brown University
Case School
Colby College
College of City of New York
Colorado College
Columbia University
Cornell University
Dartmouth College
Dickinson College
George Washington University
University of Chicago
University of Colorado
University of Florida
University of Georgia
University of Illinois
University of Indiana
University of Kansas
University of Kentucky
University of Maine
University of Michigan
University of Minnesota
University of Missouri
University of Nebraska
University of North Carolina
University of Pennsylvania

Harvard College
Haverford College
Hobart College
Massachusetts Institute of Technology
Middlebury College
Mt. Holyoke College
North Western University
Oberlin College
Ohio State University
Princeton University
Simmons College
Smith College
Trinity College
Tufts College
University of California
University of Rochester
University of the South
University of Texas
University of Vermont
University of Virginia
University of Wisconsin
Vassar College
Wabash College
Washington University
Washington and Lee University
Wellesley College
Wesleyan University
Western Reserve University
Williams College
Yale University

PEDAGOGY AS A SCIENCE

By Paul R. Radosavljevich, New York University

1. The term *pedagogy* has never been defined scientifically. It has been variously understood, or rather misunderstood, by various people and schools. Willmann would have us believe that pedagogy is a collection of historical facts, and calls it historical pedagogy. Others say that there is no systematic pedagogy; but that each age makes its own pedagogy. There are others who claim that pedagogy is mere applied psychology (Sully), ethics (Herbart, Rein), logic, sociology, or aesthetics. Lehmann, Dilthey, James, Münsterberg, and Royce believe that pedagogy is no science at all. Still others claim that the dominant theories in the pedagogy of to-day are based upon a psychology and philosophy which are largely discredited.

2. What is pedagogy? The most common definition is: Pedagogy is the science of education. This is a very short definition. In fact, it has little else, besides its brevity, to commend it. It is immediately found to be insufficient in that it, at once, provokes the question: What is education? And this question can not be answered clearly and definitely in few words.[1] Before considering this any further, let us stop to find out what the word *pedagogue* means. It means first, a practical man, an educator; second, a representative of pedagogical science. Here we distinguish between the science and its representative. In early times, a pedagogue was a man who understood the art of practical pedagogy. A Greek *Pedagogus* was a man who took care of a child.

3. Now, compare this old conception with the present aim and scope of pedagogy. To-day pedagogy has to do with everything that deals with education; it includes the scientific treatment of all questions pertaining to school education, home education, institutional education, etc. This is pedagogy in its broader sense. In its narrower sense, the sense in which it is commonly understood, pedagogy is the science of school education. We will direct our attention to this narrower sense of the word in connection with the elementary public school.

4. Is pedagogy a science, or not? This question has been asked by all practical educators. Herbart, in his "General

[1] See my article: What is education (Ped. Sem., 1911, 31-44).

Pedagogy," tried to formulate a system of pedagogy; but this was too extravagant a hope. Many thinkers call pedagogy a "general," "systematic," "practical," "theoretical," "scientific" education. All of these different expressions are but phases of a general science. Here we deal with all the fundamental problems in education. This does not mean that general pedagogy has nothing to do with special problems. Systematic pedagogy means scientific pedagogy, which is something more than an empirical collection of historical facts. It is based on scientific facts and general principles. From this science we obtain empirical knowledge dealing with the proper education of the child. Practical pedagogy is only a part of this systematic pedagogy.

5. Is pedagogy a science? Many say no. There are three general objections to calling pedagogy a science. *First:* Pedagogy is not a science because it has not a domain of its own, it borrows its facts from other sciences; such as psychology, logic, metaphysics, natural science, ethics, school hygiene, medicine, anthropology, physiology, anatomy, sociology, criminology, religion, etc. *Second:* Pedagogy is not a science because it can not formulate general principles which are universal. The theories and practices of one people are not the same as those of other people, nor are they the same as those that may be developed from time to time. Pedagogical facts must change with the political, economical, religious, social, etc., conditions. *Third:* Pedagogy is not a science because it has to do mainly with activities or practices. And there is no science of activities or practices. A human activity or practice in general may be treated as such, but that does not make it a science. The determinative factor in pedagogy is the practice experience. Pedagogy is all very well in theory, but in practice it will not answer. On what scientific basis rest such dogmatic statements?

6. Let us examine these objections in detail. In regard to the first objection we can say that although it is very difficult to formulate a science of pedagogy, it does not mean that we must give it up as impossible. As to the requirement that pedagogy is to have a clear and distinct domain of its own we can say that it is very unreasonable, for this is not true of any science, especially a mental science. Indeed the characteristic of the sciences is that they are interrelated, i. e., they have no clear and distinct borderline. Thus we take up under geography many topics which may be treated as well, if not better, under astronomy, meteorology, climatology and other sciences. Physiology includes many problems of a psychological nature. Yet geography and physiology are

sciences, because they treat certain facts from their own standpoint. The *unity of point of view* and not only the unity of material, is essential to a science. Meumann and G. S. Hall made this clear.

7. The point of view in pedagogy is that of the growth and development of the child under the influence of one who is educating him according to a certain aim and plan. An empirical science can not be a system of knowledge, as Herbart thought. In an empirical science it is impossible to treat facts as they are treated in chemistry, because our inquiry and our experience are not complete.

8. The second objection was raised by the late Wilhelm Dilthey. But his objection is too general and vague. The aims of education may be historical because they change, but we must establish them. The means and ways by which these aims are reached may also be established. And this is quite enough, for it is possible to establish certain principles on which the aims of a certain age are based. A nucleus may also be taken from history, especially in regard to elementary aims. For example; reading, writing, and counting were the elementary aims in all ages. Of course, the ways and methods of teaching them varied from time to time, but their function was permanent. Higher aims allow also of scientific formulation, which may be fairly constant through the ages. The aim should be a general striving of the world toward a certain ideal perfection. Another ideal is to develop the abilities of the child as far as possible.

9. Coming now to the third objection, we may say that no science can furnish a set of rules which will help one in its application as much as practical experience and skill will. For example, one may know the principles of art, yet he can not draw, paint, or mould until he has gained some experience and skill. The same is true of other sciences. In a sense the practical experience and skill is the source of the scientific principle. We then, in turn, adopt certain principles for practical application. This method was unduly overestimated by Pestalozzi. According to his theory any person, with a minimum of intelligence, would do well as a teacher provided he knew the method.

10. To dictate a set of rules for practical application is the last aim of the science of pedagogy. The first thing in pedogogy is the theoretical *understanding* of its practice. This will guide the teacher and enable him to understand what he is to do. Theoretical understanding of practice will supply him with scientific material. It will acquaint him with the mental, emotional, and volitional peculiarities of

his pupils at the different stages of their development. It will lead him to understand why some subjects are selected for purposes of instruction, while others are rejected. He will know what subjects require the analytic and what ones require the synthetic treatment. He will have decided views as to the value of certain subjects, i.e., are the mathematical subjects more valuable than the linguistic subjects? He will also know whether the public school is to give a general or a special education. In short, the theory gives the norms for practice. And let the teacher understand these norms in connection with other modern problems. As a science is always something more than a mere inventory of facts, it is the combination of those facts into a system in such a manner that each fact throws light on all the others. And because no such connection can be made without a general principle, pedagogical principles are just as necessary as facts to form a science.

11. What, then, is the task of scientific pedagogy? It is an experimental science. It has its own data and principles. It is, therefore, entitled to describe and explain pedagogical facts. The scope of these facts is as large as the field of human action. Experimental or scientific pedagogy not only has to describe and explain pedagogic facts, but it also has to lay out the path which directed education is to follow. Further, it is constantly investigating whether or not this directed education is serving its purpose. It prescribes certain norms; it is, therefore, a norm science.

12. Pedagogy is an independent science; for it has its own foundation. The point of view is exclusively pedagogical. No other science takes this point of view. Therefore, no other science is a science of pedagogy. It is impossible to write a pedagogy as an applied psychology or ethics; nor is it possible to treat it as applied logic. There are many sciences that borrow facts from other related or unrelated sciences, such as psychology, ethics, logic, aesthetics, etc.; yet these sciences are not identified with psychology, ethics, or logic. Still less are they said to be applied psychology, applied ethics, or applied aesthetics. Why is it then, that pedagogy is so often called applied this or applied that, when it merely borrows some facts, as other sciences do? There does not seem to be any plausible answer to this question. Yes, pedagogy is an independent science. Not one single pedagogical rule comes from logic or psychology. The facts of experimental pedagogy clearly show that pedagogy is a science with its own materials and facts, and with its own point of view.

13. Many accept the well-known formula of Herbart, namely, pedagogy depends upon its sister sciences, ethics and psychology. Ethics furnishes the aim, and psychology the means of education. But this is not sufficient. Pedagogy has for its aids not only ethics and psychology, but also philosophy, anthropology, physiology, sociology, aesthetics, cultural history, etc. Ethics alone cannot formulate all the aims in education, because ethics is not the only thing the child is to get in a public school. We must not forget that the primary aim of education is intellectual instruction (i.e., knowledge and skill) and that ethical training is only one of the secondary aims.

14. Pedagogy as a science ought to include the following problems:

A. The child's psychological nature and its development. (*Individual pedagogy.*) Here we need a broad conception of childhood. As child, or better to say, pupil study "marks the introduction of evolutionary thought into the field of the human soul" (G. S. Hall), modern pedagogy must be a biological pedagogy, or as Lay says in his Experimentelle Pädagogik (1905, p. 105), "sie muss die *naturale* and *soziale* Seite der biologischen Lebensgemeinschaft gleichzeitig und gleichmässig beachten." Therefore, pedagogy as a science has to study carefully:

I. The periods and stages of development and growth. (*Biological pedagogy.*)

II. The difference between a child and an adult; the approach of a child's mental and physical type to that of an adult. (*School anthropology.*)

III. Not the child in general, but the school child—pupil's place in school work. (*Experimental Pedagogy.*)

1. Analysis of different kinds of mental processes.
2. Favorable or unfavorable inner and outer conditions for work.
3. Technique and methods of mental work. (Economical learning.)
4. Relation between pupil's work and the school. (Hygiene of home and school work.)
5. Study of the pupil's emotional and volitional nature. (Development of pupil's ideals, practical aims, moral judgments, etc.)

B. Methods of teaching and education. (*Experimental Didactics.*)

C. Teaching material and means (the claims of logic and psychology deserve here the highest consideration).

Here we have to give a scientific basis for the presentation of school subjects in text-books. (*School Methodology.*)

D. Organization of Schools. (*Practical Pedagogy.*)

E. The final aims of education. (The highest aims: ethical and aesthetical.) (*Philosophy of Education.*)

F. The relation between the child and different classes of mankind, or the relation between school and society, state, and home. (*Social Pedagogy.*)

There is a crying need at present for a critical and systematic study of pedagogy as a science. These few words are only preliminary suggestions.

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BOOK NOTES

Idealism in Education, or first principles in the making of men and women, by H. H. Horne. New York, The Macmillan Co., 1910. 183 p.

As the title would suggest, this new book, "Idealism in Education," by Dr. Horne, is based on Hegelian philosophy in the protest against the more recent tendencies to discuss educational principles from purely biological or psychological points of view. The author fears that the philosophical aspects and especially idealism are being slighted. The work is acknowledged to be, in many respects, a sequel or expansion of the views formerly expressed on pages 252-254 of the author's "Philosophy of Education." The main thesis to be defended and amplified is that will, or the individual's own control or choice when other things are fixed, is co-equal with heredity and environment in determining behavior. Heredity must be emphasized for the unconceived generation, environment for the child of to-day, and will for the adolescent or adult.

Galton coined the term "eugenics" to express proper heredity. J. A. Thompson uses the term "eutopia" to characterize desirable environment. The author suggests "eunoia" or "good will," of orthodox Greek coinage, to complete the trinity of "eus" constituting what he calls "the empirical first principles in the making of men and women." The new term reflects "the traditions of Socratic intellectualism" and "suggests feeling and acting in accord with knowledge."

In its general scope the book takes up the three cardinal aspects of man-making as the author views them. Heredity, environment and will are each treated in their relations to pedagogy rather than to pure science or philosophy. No effort is made to take issue with theories or policies in the biological fields and no contributions are offered. The author merely presents the salient facts known about them in an effort to show that each along with will must be considered in all educational policies and reforms. In a closing chapter the author exercises his personal prerogative and his philosophic bent by going beyond knowledge into speculation. In this, the reader is given a hasty survey of the various philosophies or "guesses" which have been advanced in attempting to explain the process of man-making. The progress of the world along several lines under these hypotheses is also reviewed.

The entire study seems to point to the exaltation of idealism and the establishment in the author's mind, at least, that within the limits which heredity has fixed for the individual and which the opportunities of environment have prescribed, the individual may become what he will; and so long as science is unable to point out those limits, it is safe to encourage the exercise of a broad and comprehensive free will, to hold up the greatest characters of history, who are "the earnest of the coming men and women God is making through present men and women, and thus raise the standard of expectancy in the minds of the children.

In its form the work is especially to be commended for its clear logical arrangement and the lucid sincere scholarly manner in which it is presented. The table of contents is analytic, presenting every

chapter in its main topics as well as in its sub-heads, so that the busy reader may grasp the scope of the book in a few pages. Of no less interest is the well selected bibliography at the close of each chapter. In its complete topical index the work also conforms to the best usages of recent texts and reference works.

The book is by one too well known and too highly respected to require more than the general statement that it is, for the most part, consistent with his formerly published views, and is an excellent illustration of the success with which a follower of Hegel can appropriate all that modern science has discovered, build from it a concrete practicable educational policy and still maintain the original position of the dominance of idealism, or at least that dominance tempered to equality in the proposition that "eugenics, eutopias, eunoias are the chosen means of the Divine purpose in perfecting mankind." In this age of realism, materialism, not to say scepticism, it cannot be amiss to harken to one who is able to modify and not abandon past methods; to one who assumes to grasp, appreciate and use all that is new, to enrich what is old, in forming not only a system of practical pedagogy but a policy of race improvement.

If one should criticize the work one might raise the question whether the author establishes his thesis, or whether anything valuable is to be contributed by establishing it. The logic is convincing, at least for the moment, in spite of the fact that the influence of idealism as conceived by him is analogous to the effort in lifting oneself by the bootstraps. It is worth something to education to have brought two such mutually opposing principles as heredity and will, or environment and will, so nearly into fusion, although unequally yoked with the biological conceptions of heredity and environment. The following quotation is characteristic of the discussion. "Will by effort realizes the inherited capacity and utilizes the environing opportunity." (p. 140.) Such a statement is an attempt to put Hegelianism in modern phraseology. If the author should as diligently formulate a conception of will as the dynamic life force rather than the supervising and directing agency, without regard to co-equality or a trinity of terms, the work would be more consistent and probably more valuable to the profession, but perhaps less Hegelian. In its present form, though the work is full of interest and of very great value, it is somewhat unsatisfactory as an effort to ally idealism with geneticism. L. W. SACKETT

Vorlesungen zur Einführung in die experimentelle Pädagogik und ihre psychologischen Grundlage, von ERNST MEUMANN. Zweite Auflage. Erster Band. Leipzig, Engelmann, 1911. 725 p.

This is the first volume of a new edition of this well known work. It has been largely rewritten and increased from two, which comprised the edition of 1907, to three volumes. The greatest progress in these two years which he notes is that in the study of the work of school children, and to the former work he adds two important topics, viz., instruction in foreign languages and in mathematical departments. He notes the rapid progress of child psychology and of the study of adolescence or youth. The present volume now contains only studies on the development of youth. The second volume will continue this subject and discuss the relations between development and tests of intelligence, while the third is devoted to didactics and the principles of general pedagogy as based upon these.

The social factors affecting special supervision in the public schools of the United States, by WALTER ALBERT JESSUP. New York, Teachers' College, 1911. 123 p. (Columbia University Contributions to Education, No. 43.)

This study was undertaken in connection with a course in educational sociology. It treats of music, drawing, manual training, domestic science, physical education, penmanship, distribution of special lists, salaries, sex selection, division of responsibility, summary and conclusion.

The children's educational theater, by ALICE MINNIE HERTS. With an introduction by Charles W. Eliot. New York, Harper & Bros., 1911. 151 p.

The author worked seven years in organizing the Children's Educational Theater in New York. In this book she explains the reasons of its origin and the enthusiasm with which the undertaking was supported and the wide influence it has exerted and also how similar theaters can be organized all over the country. The dramatic instinct, says the author, is a primitive influence not to be confused with dramatic talent which is a specialized form of it. This instinct cuts a new and safe channel for a hitherto undirected stream of human energy. Children's love of such entertainment is shown by cheap vaudeville and moving picture shows. In these performances at the children's theater both players and audience were interested and developed artistically, mentally and morally. It is a very interesting and unique story, told with a number of full page illustrations by the author of the movement who will always merit a high place in the development of the movement that seems now to have a great future before it.

Teachers' guide for the use of the "600 set" of Keystone stereographs and lantern slides for visual instruction, by DOUGLAS C. RIDGLEY. Meadville, Pa., Keystone View Co., 1911. 347 p.

The demand for stereographs and lantern slides from teachers is already considerable and is rapidly growing. This book describes a series of 600 pictures selected with special reference to the courses of study in the best elementary and high schools of the country. It is meant to be a school library of pictures. They comprise geographical, historical, commercial and scientific topics with special sections on the world wonders, domestic arts, city life, agriculture, homes, the world's children, races, botany, zoology, geology.

Pure foods, by JOHN C. OLSEN. Ginn & Company, Boston, 1911. 210 p.

The chief trait of this little new book is the experimental illustrations that accompanied the lectures upon which it was based. Some of the experiments are so simple that they could be carried out with ordinary household utensils and some require a well equipped chemical laboratory. The topics are what is food, when is it pure, cost, milk, fats, meats, carbohydrates, candies, food colors, preservation, bread and cereals, spice, condiments, extracts, etc.

Papers on inter-racial problems communicated to the First Universal Races Congress, held at The University of London. July 26-29, 1911. Edited by G. Spiller. London, P. S. King & Son, 1911. 485 p.

That the full report of this congress which ended July 29th is available to readers before the end of September is an admirable example

of promptness of publication which should be copied by other conferences and congresses in order that the cause may profit by enabling all interested to read such portions as concern them before the memory of the congress itself has faded. The papers are grouped by sessions into fundamental considerations, general and then special problems, conditions of progress, special problems in inter-racial economics in general, followed by a session with special reference to the Negro and American Indian, positive suggestions for promoting an inter-racial friendliness which occupied the last two sessions. Like all such conferences, the papers differ greatly in merit, but the level of interest, ability and instructiveness is remarkably high.

Nationalities and subject races. Report of Conference held in Caxton Hall, Westminster, June 28-30, 1910. London, P. S. King & Son, 1911. 178 p.

This conference held in London in June was specially to bring together the best opinions concerning "obscure people for whose welfare so few care and upon whom for long centuries the most cruel wrongs have been inflicted by men claiming to belong to higher races." Such conditions were considered in Egypt, India, Finland, Persia, Georgia, Ireland, including fixed and indentured labor, the influence of contact with white men, slavery and the anti-slavery movement. The last session was devoted to proposed remedies. The philanthropic note here dominates.

Questions in municipal civics, by ALBERT A. GIESECKE. Syracuse, C. W. Bardeen, 1911. 114 p. (Cornell Study Bulletins for Teachers, No. 5.)

This book is written on the assumption that city high schools should utilize municipal civics as a means for training citizenship. This the writer believes is more important as well as nearer than national issues. So he discusses relation of city to state, parties, people's duties, the city council, executive, protective, developmental, finance and other functions.

Truths: talks with a boy concerning himself, by E. B. LOWRY. Chicago, Forbes & Company, 1911. 95 p.

This work is addressed to young boys and is simple and elemental. Its chief topics are sowing wild oats, real men who accomplish something, the venders of fake advice, mechanism of our bodies, man's responsibility, the frog pond and the chicken yard, etc.

Confidences with a young girl concerning herself, by EDITH B. LOWRY. Chicago, Forbes & Company, 1911. 94 p.

This is a companion book to the above. Its captions are the secret, flower and bird babies, mother's baby, baby's nest and its building, the sign language, rest and sleep, injury to the next.

Herself: talks with women concerning themselves, by E. B. LOWRY. Chicago, Forbes & Company, 1911. 208 p.

This is another book which is intended to meet the needs of young women and to give them knowledge of the structure and functions of their body so far as it affects the welfare of future generations. Many of its 25 chapters are therefore thus upon anatomy, disease, the black plague, embryology, maternal impressions, why girls and boys go astray, self-abuse, white slavery, what should the child be told, women in business, nervousness, etc.

The answer, by W. J. CHIDLEY. Melbourne, The Australian Authors' Agency, 1911. 79 p.

Human confessions, by FRANK CRANE. Chicago, Forbes & Company, 1911. 232 p.

The author of this book was until lately a very eloquent preacher and pastor, and he here brings together many very pungent and effective aphorisms on many points of human life which a clergyman sees and very many which very many clergymen never see. The different articles are hardly ever over two pages long, and the caption hardly gives an adequate idea of the contents. It is, however, a most readable and helpful book.

The education of sex. Published by the Gravic Publishing Company, Philadelphia, 1911. 275 p.

This is a compilation from the writings and teachings of many eminent teachers and authorities forming a text book on the physiology of marriage, the phenomena of life, existing social evils and needed reforms, edited by Dr. G. M. Vickers, who draws very freely upon the works of perhaps thirty different authors and seems rather to give the place of honor to Edward W. Sims of Chicago for his fearless reform work. The work treats of many subjects, anatomy, various forms of sex abuse, what a wife and husband ought to be, race suicide, who should and who should not marry, prenatal life, diseases, etc. It is a very plain spoken book and seems to have been compiled with a sense of the great importance of the subject. It is a little difficult to see just what class the work is intended for. Rather it attempts to reach many classes and many kinds of need. In our judgment, it is not, as it stands, the kind of book to be placed in the hands of the young, and yet parts of it contain much that they ought to know.

A history of classical philology, from the seventh century B. C. to the twentieth century A. D., by HARRY THURSTON PECK. New York, The Macmillan Company, 1911. 491 p.

The author's long experience as a teacher has convinced him that those who pursue the most advanced classical courses are very imperfectly informed as to the history of the subject upon which they are engaged. He writes in the conviction that students proceeding to their doctorate in Greek and Latin should have a knowledge of the larger field of which their work forms a part. It is to supply this need that this book is written in eleven chapters, beginning with the philological studies in Greece, coming down to the Alexandrian, Graeco-Roman, Middle Age, Renaissance, Erasmus period, that of nationalism, the German influence and finally, the cosmopolitan period. Although the work of a scholar, it is written in a way to interest all students of the subject.

Syllabus of a course of study on the history and principles of education, by PAUL MONROE. New York, The Macmillan Company, 1911. 87 p.

Although these reference lists are not exhaustive in the sense of Cubberly's syllabus, with its analytical bibliography, the design here is to give the most available useful literature of that likely to be found in the ordinary college and normal school, so that few foreign references are given.

A history of the Rhode Island Normal School, by THOMAS W. BICKNELL. 1911. 236 p.

The author was the man who more than any other did the great work of organizing the National Educational Association into the great power it has since become. As editor of the Boston Journal of Education and as President of the N. E. A. at the great Madison meeting some twenty years ago, which he made the first of the great meetings, attended by 10,000 or 15,000 teachers, he did a very great service. In his retirement he has occupied himself by writing this history of the normal school of his own state in a broad way based largely upon his own personal knowledge and so as to show the general history of education in that state.

An American history, by DAVID SAVILLE MUZZEY. Boston, Ginn & Co., 1911. 662 p.

This volume is said to represent the newer tendencies in history teaching. Its aim is not to tell over once more the old story in the old way, but to give emphasis to those factors in our national development which appeal to us as the most vital from the standpoint of to-day. Beginning with the discovery of America, the writer comes down to the twentieth century, Spanish War, Roosevelt politics and present day problems. The work is illustrated.

Practical botany, by JOSEPH Y. BERGEN and OTIS W. CALDWELL. Boston, Ginn and Co., 1911. 545 p.

As set forth here, the study of plants is related to every day life more closely than in most textbooks. Those aspects of plant life are presented that have the largest significance to the public in general and which are of interest and educative value to beginning students. The work is illustrated by nearly 400 cuts and diagrams of various kinds.

Descriptive writing, by EVELYN MAY ALBRIGHT. New York, The Macmillan Company, 1911. 275 p.

This book is intended as a text in a composition course. It teaches how to give practice in descriptive writing to increase the range of observation, imagination and expression. The first part is devoted to the theory of description, and the second to illustrative material.

Chemistry by WILLIAM CONGER MORGAN and JAMES A. LYMAN. New York, The Macmillan Company, 1911. 429 p.

These writers believe that a student should never be allowed to get the idea that chemistry is a science of girls in the laboratories and acts chiefly in beakers and test tubes. So they have attempted to bring out the humanistic side of a science which is richly laden with human interests because very significant to the race. The authors have tried not only to produce practical material, but also to teach chemistry as a science. To our mind, this text constitutes a very interesting and new departure so far as it seeks to lighten, illuminate and make practical the general principles of the science by showing its applications. This is surely the pedagogic way of approach for the young.

Introduction to general science, by PERCY E. ROWELL. New York, The Macmillan Company, 1911. 302 p.

This book is designed to impress the young with a proper conception of man's place in nature; to make him widen his survey from

his immediate surroundings in time and space till he can understand what distinct forces have shaped his own life and its environment. It might serve as a kind of introduction or birdseye view after taking which the youth would be better qualified to select a specialty. Beginning with chemical phenomena, it ends with such subjects as sanitary plumbing, reading meters, manner of living, etc. The botany and geology are largely economic. The book is certainly a most courageous attempt as it were to give an open sesame to the domain of scientific knowledge, but we cannot think the author has succeeded very well, that is, we cannot believe that his points for emphasis are wisely chosen or that many things he excludes should have been excluded.

Teacher's certificate issued under general state laws and regulations, by HARLAN UPDEGRAFF. Washington, Government Printing Office, 269 p. (U. S. Bureau of Education, Bulletin 1911, No. 18, Whole No. 465.)

Le spectateur: revue critique paraissant chaque mois. Paris, Henry Falque. Troisième année, No. 28, October, 1911.

The new Schaff-Herzog encyclopedia of religious knowledge. Edited by Samuel Macauley Jackson, with the assistance of Charles Colebrook Sherman and George William Gilmore. New York, Funk & Wagnalls, 1911. 504 p. Vol. XI, Son of Man—Tremelius.

Third reader, by KATE F. OSWELL and C. B. GILBERT. New York, The Macmillan Company, 1911. 244 p. (The American School Readers.)

Undergraduate work in mathematics in colleges of liberal arts and universities. International Commission on the Teaching of Mathematics. The American Report. Committee No X. Washington, Government Printing Office, 1911. 30 p. (U. S. Bureau of Education Bulletin. 1911, No. 7. Whole No. 453.)

Training of teachers for elementary and secondary mathematics. International Commission on the Teaching of Mathematics. The American Report. Committee No. V. Washington, Government Printing Office, 1911. (U. S. Bureau of Education. Bulletin 1911, No. 12, Whole No. 459.)

A cyclopedia of education. Edited by Paul Monroe, with the assistance of departmental editors and more than one thousand individual contributors. New York, The Macmillan Company, 1911. Vol. 2, Chu-Fus, 726 p.

The educational views and influence of DeWitt Clinton, by EDWARD A. FITZPATRICK. New York, Teachers College, 1911. 157 p. (Teachers College, Columbia Contributions to Education, No. 44.)

NOTES

A new trade school in Boston, founded by Arioch Wentworth, a citizen of Boston who left over three and a half million dollars for the purpose of "furnishing education in mechanic arts," has already nearly completed its first building and now announces its scope. The initial group of buildings will provide for one-year courses in three building and three manufacturing trades, designed primarily for apprentices. More thorough courses are given to make superior workmen, mechanics and foremen, and are open to those of unusual ability. These two-year courses are to be in machine construction and tool design and electrical instruction and operation. In order to utilize the plant to its maximum, the Wentworth Institute will offer instruction at night similar to that during the day. It will have part-time courses with weekly alternations between employment and school work. In order to keep out those who have little genuine interest in the work a fee of only $6.00 per term is charged and $6.00 for two terms of evening school. So far the plan of the Institute presents nothing startling, but will evidently be a great addition to the admirable educational opportunities offered in Boston. But now comes the great and splendid innovation which Wentworth Institute is making and is contained in the following sentence from its announcement: "No definite amount of previous school training should be required as a standard, but boys who have been partly or perhaps entirely through the high school should be found working side by side with boys who have not even graduated from the grammar school. There are no entrance examinations required for the one-year day courses or for the evening courses. Ability to profit by the instruction is the only requirement." In this element of the plan, Wentworth Institute already more than justifies its existence. It promulgates the principle that children and youth have a right to those opportunities by which they will most profit. It also proclaims that industrial ability has no necessary dependence upon or connection with mere scholastic training. It practically invites all those who can really profit by its courses to come, regardless of every other consideration. This view of human nature is quite in accord with the psychology that is now teaching the independence of human powers one from another and that at least in the scholastic sense there is no such thing as general education.

The Survey[1] reports the first public meeting of the New York League for the Improvement of the Children's Comic Supplement. This league seeks to be a kind of home mission to protect the child against a heathen press which one writer said went on the assumption that all children love to lick paint off wall paper. The *Brooklyn Eagle* is making a high appeal to children against what Hamilton Mabie calls "the most pernicious and vulgarizing single influence that is brought to bear on the child at his most impressionable age." Some of these artists show great originality and inventiveness but the constant push to get something new soon exhausts spontaneity and results in vulgarization. Instead of new "slops," why not revive the work of the old humorists, although we must not deny all justice

[1] April 15, 1911, p. 103.

to Little Nemo or even to Buster Brown. Children should not be taught a form of humor that inculcates disobedience, ridicule, trickery, practical jokes, sensationalism, love of ugliness, meanness and destroys the exquisite natural qualities of the young mind. It is not the sheltered nursery children but those of the poor, to whom the newspaper is the chief intellectual food, that the danger is greatest. These children have keen insights, brilliant imaginations and find the element of cleverness very captivating, but why not make it also healthy like that of Lewis Carroll or Peter Newell?

In an article entitled "Il metodo Montessori esperimentato in una 1.ª classe elementare nell' anno scolastico 1910-11," published in the *Rivista Pedagogica,* November, 1911, and received too late to be incorporated in the article printed in this issue, we have the report of an experiment in the Montessori method as applied to the first grade of the common schools of Rome. The class was formed October 26th, and thirty-one children were registered, but of these six were removed by the medical inspector, two were found to have already had some instruction in reading, and two removed from the locality. Twenty of the children remaining in the class were either already six years of age or reached their sixth birthday before January 1st, one was a backward child of nine, arrested in physical development, and whose mental development appeared to be inferior to that of the children of six. To the twenty-one children thus regularly enrolled were added, for the sake of experiment, two children taken from private kindergartens, who, being only five years old, were too young to be regularly enrolled in the public schools.

As the experiment was conducted in an ordinary school room, furnished with the usual stationary desks and seats instead of being equipped in accordance with the new method, the conditions were by no means ideal for securing the physical liberty of the pupils, deemed by Dr. Montessori so necessary for free intellectual and moral development. The didactic material for teaching reading, writing and arithmetic was not received until January 15th, and the time from October 26th to that date was spent in sense training and especially in muscular and practical exercises, *i. e.,* in developing freedom of movement and independence in waiting upon themselves. All these children had been in a kindergarten but the teacher found them lacking in spontaneity, and complained that they confused goodness and discipline with immobility and silence, so that it was by no means an easy task to inspire them with the idea of freedom in both physical and intellectual movement and individual self-discipline which are fundamental characteristics of the Montessori method.

The autosensorial education was carried on by means of the material which Dr. Montessori has scientifically adapted to the purpose. But this sense training is not limited to the mere reception and retention of the things observed, for the children not only use their powers of observation but they draw their own conclusions and apply their acquired knowledge in every way possible. The interest and unhampered energy of the child being the mainspring of the progress, the teacher noted that the mental food was always adapted in quality and right in quantity for the assimilation of the individual child, and she herself marveled at the results of this spontaneous evolution. With the simple phonic method of teaching the vowels and consonants already described, with simultaneous stimulus of the visual tactile-muscular and auditory sensations, the pupils began spontaneous composition before they had learned the whole alphabet and were thus stimulated to acquire the sounds and symbols which they lacked. There were great individual differences, and the period of learning all the

letters of the alphabet and the different combinations into words varied from five to thirty days for the different pupils. It is to be remembered, however, that the learning to read and write is merely the culmination of the previous sense-training. Generally, the learning to read, which began with exercises in composition by means of the movable letters, followed by reading of lesson cards of the first, second and third grades, preceded the phenomena of spontaneous writing. After this stage was reached progress became more rapid.

When the school closed on June 17th eighteen of the children, including the two five-year olds, passed the examination for the second grade. Several of them had surpassed the requirements, being able not only to read and write fluently, but also to read and write numbers beyond 100,000 and to perform addition and subtraction with four, five and six figures. Some of them developed a great fondness for arithmetic and amused themselves by making examples on which to exercise their newly acquired powers. Of the five who did not entirely complete the work of the first grade, one was the backward nine year old, one a child with hereditary defects who could not speak plainly and one a child handicapped by malnutrition. The two others were very near reaching the standard, but as the normal and spontaneous development of the child is the aim of the system, no effort to hasten their progress was made. Perhaps the most interesting thing in the experiment is the fair opportunity for each child to develop in accordance with his own abilities without forcing and without retardation, the more gifted children as well as those less amply endowed doing the work suited to their capacities and doing it happily and with a sense of conquest, for the dullest of these children had no sense of discouragement or failure. So unconscious are they of being taught that one of them, exulting in the newly discovered ability to write, naïvely asked her teacher, "Can you write?"

THEODATE L. SMITH

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